

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Seventh Edition 2014 with 2015 Interim Provisions.

DESIGN LOADING

Live Load HL - 93

TRAFFIC DATA

Current (2013) AADT 8,840
Future (2033) AADT 10,610
DHV - % of AADT 11%
Design Hour Volume 1,167
Heavy Trucks (% of AADT) 10%
Heavy Trucks (% of DHV) 8%
Directional Distribution (% of DHV) 52%
18 kip Equivalent P 2.0 581
18 kip Equivalent P 2.5 554
Design Speed (mph) 35

MATERIALS

Concrete:
Transition Barriers Class "LP"
All Precast Elements (Deck Panels & Permanent Barrier) Class "P"
Precast Panel Joints UHPC
All Other Class "A"

Reinforcing Steel
Curbs, Permanent Barrier & Transition Barriers ASTM A 775,
(Epoxy-Coated) Grade 60
All Other ASTM A 615, Grade 60

BASIC DESIGN STRESSES

Concrete, Class "A" f'c = 4,000 psi
Concrete, Class "LP" f'c = 5,000 psi
Concrete, Class "P" f'c = 6,000 psi
Concrete, UHPC f'c = 14,500 psi
Reinforcing Steel fy = 60,000 psi

FAIRFIELD
SOMERSET COUNTY
WESTERN AVENUE BRIDGE
OVER
INTERSTATE 95
STATE ROUTE 139
FEDERAL AID PROJECT NO. STP-2048(300)
PROJECT LENGTH 0.089 mi.
BRIDGE NO. 5819

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities	2
General Notes	3
General Plan	4
Profile	5
Typical Sections	6
Cross Sections	7-10
Construction Staging Sections	11
Maintenance of Traffic	12-13
Temporary Signal Plan	14
Detour Signing Plan	15
Sign Summary	16
Jacking Details	17
Abutment/Wingwall Modifications	18
Bearing Details	19
Shear Stud Layout	20
Superstructure Plan & Typical Section	21
Superstructure Placement Sequence	22
Superstructure Details	23-31
Modified Transition Barrier	32
Utility Plan	33

UTILITIES

Central Maine Power
Fairpoint Communications
Time Warner Cable
Town of Fairfield Sewer
Kennebec Water District
Oxford Networks
Summit Gas
Maine Department of Transportation

MAINTENANCE OF TRAFFIC

Maintain one lane of two - way alternating traffic controlled by temporary traffic signals. Limited nightly closures of Western Avenue and Interstate 95 permitted for precast panel installation and other selected construction activities.

PROJECT LOCATION:	Western Avenue (State Route 139) over Interstate 95 Bridge, located at Mile 132, Latitude 44°35'42" N, Longitude 69°36'54" W
PROGRAM AREA:	Bridge
OUTLINE OF WORK:	Bridge Deck Replacement



WIN 20483.00

STP-2048(300)

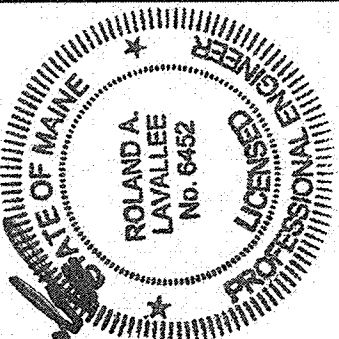
FAIRFIELD
WESTERN AVE. BRIDGE

TITLE SHEET

SHEET NUMBER

1

OF 33



Signature: Roland A. Lavallee
P.E. NUMBER: 6462
DATE: 6/29/15

PROGRAM	BRIDGE
PROJECT MANAGER	MARK PARLIN
DESIGNER	TIM COLE P.E.
CONSULTANT	HNTB
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER	6/30/15	6/30/15
CHIEF ENGINEER	6/29/15	6/29/15

Date: 5/21/2015

Username:

Division:

Filename: 001_Title.dgn

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.10	Removing Existing Superstructure Property of Contractor:Western Avenue Bridge (1080 SY)	1	LS
202.12	Removing Existing Structural Concrete	1	CY
202.13	Remove Existing Railings Retained by Department	556	LF
202.202	Removing Pavement Surface	470	SY
203.20	Common Excavation	43	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	8	CY
304.14	Aggregate Base Course - Type A	18	CY
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	62	Ton
403.2081	Hot Mix Asphalt - 12.5 mm (Polymer Modified)	183	Ton
403.209	Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (sidewalks, drives, islands & incidentals)	5	Ton
403.211	Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming)	12	Ton
403.213	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base Course)	10	Ton
403.2131	Hot Mix Asphalt - 12.5 mm (base and intermediate course, Polymer Modified)	146	Ton
409.15	Bituminous Tack Coat, Applied	99	GAL
502.21	Structural Concrete, Abutments and Retaining Walls	0.5	CY
505.08	Shear Connectors:Western Avenue Bridge (3404 Each)	1	LS
508.14	High Performance Waterproofing Membrane:Western Avenue Bridge (1070 SY)	1	LS
514.06	Curing Box for Concrete Cylinders	1	EA
515.21	Protective Coating for Concrete Surfaces:Western Avenue Bridge (510 SY)	1	LS
520.232	Expansion Device - Asphaltic Plug Joint	68	LF
523.52	Bearing Installation	50	EA
523.5551	Pot or Disc Bearings, Fixed	10	EA
523.5552	Pot or Disc Bearings, Expansion	40	EA
524.301	Temporary Structural Support:Western Avenue Bridge	1	LS
524.40	Protective Shield:Western Avenue Bridge (137 SY)	1	LS
526.301	Temporary Concrete Barrier, Type I:Western Avenue Bridge (150 LF)	1	LS
526.304	Temporary Concrete Barrier, Anchored:Western Avenue Bridge (282 LF)	1	LS
527.34	Work Zone Crash Cushions	2	Unit
535.302	Full-Depth Precast Concrete Deck Panels (1050 SY)	1	LS
605.011	2" Underdrain Pipe - Utility Trench (46 LF)	1	LS
606.1721	Bridge Transition - Type I	4	EA
606.23	Guardrail Type 3c - Single Rail	113	LF
606.232	Guardrail Type 3c - over 15 ft radius	54	LF
606.353	Reflectorized Flexible Guardrail Marker	2	EA
606.79	Guardrail 350 Flared Terminal	1	EA
609.34	Curb Type 5	190	LF
609.35	Curb Type 5 - Circular	14	LF
610.08	Plain Riprap	49	CY
615.07	Loam	15	CY
618.141	Seeding Method Number 3	3	Unit
619.1201	Mulch, Plan Quantity	3	Unit
620.58	Erosion Control Geotextile	96	SY
626.332	30-inch Diameter, greater than 8-feet long, and all 36-inch and 42-inch Diameter foundations	5	CY
627.733	4" White or Yellow Painted Pavement Marking Line	4,490	LF
627.76	Temporary Pavement Marking Line, White or Yellow:Western Avenue Bridge	1	LS
627.77	Removing Existing Pavement Marking	4,400	SF
629.05	Hand Labor, Straight Time	20	HR
631.10	Air Compressor (including operator)	20	HR
631.11	Air Tool (including operator)	20	HR
631.12	All Purpose Excavator (including operator)	10	HR
631.172	Truck-large (including operator)	10	HR
631.21	Road Broom (including operators and hauler)	10	HR
637.071	Dust Control :Western Avenue Bridge	1	LS
639.18	Field Office, Type A	0.5	EA
643.72	Temporary Traffic Signal:Western Avenue	1	LS
645.103	Demount Guide Sign	1	EA
645.113	Reinstall Guide Sign	1	EA
645.156	Dynamic Message Sign, Maintenance and Operation	0.5	LS
645.289	Steel H-Beam Poles	1,350	LB
652.30	Flashing Arrow	2	EA
652.312	Type III Barricades	6	EA
652.33	Drum	130	EA
652.34	Cone	100	EA
652.35	Construction Signs	1300	SF
652.361	Maintenance of Traffic Control Devices:Western Avenue Bridge (130 Calendar Days)	1	LS
652.38	Flagger	600	HR
652.381	Traffic Officers	256	HR
652.41	Portable Changeable Message Sign	3	EA
656.75	Temporary Erosion and Water Pollution Control	0.5	LS
659.10	Mobilization	0.5	LS
659.10	Mobilization - Sewer	1	LS
801.60	Sewer Line Support Adjustment	1	LS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2048(300)

BRIDGE NO. 6819WIN20483.00BRIDGE PLANS

WESTERN AVENUE BRIDGE
INTERSTATE 95
FAIRFIELD SOMERSET COUNTY

ESTIMATED QUANTITIES

SHEET NUMBER
2
OF 33

GENERAL NOTES

1. The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract items.

2. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.

3. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.

4. Place loam 2 inches deep on all new or reconstructed side slopes or as directed by the Resident.

5. Guardrail end treatments shall be installed concurrently with the placement of each section of beam guardrail. No exposed ends are allowed.

6. Protective Coating for Concrete Surfaces shall be applied to the following areas and paid under 515.21:

 All exposed surfaces of concrete curbs,
 Fascias down to the drip notch,
 All exposed surfaces of Concrete Transition Barriers,
 Permanent barriers and curbs

7. Project info referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/contractors/#projecttbl>

8. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

9. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

 a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

 b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

 c. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.

10. The Contractor shall submit a Bridge Deck Removal Plan to the Resident at least 10 business days prior to the start of demolition work. The plan shall outline the methods and equipment to be used to remove and dispose of all materials included in the existing bridge deck. No work related to the removal of the bridge deck shall be undertaken by the Contractor until MaineDOT has reviewed the Bridge Deck Removal Plan for appropriateness and completeness. Payment for all work necessary for developing, submitting and finalizing the demolition Plan will be considered incidental to the bridge deck removal pay item.

11. The steel portions of the existing bridge are coated with a lead-based paint system. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the project. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. The Contractor is solely responsible for the care, custody and control of the components of the existing bridge that have been removed and any hazardous waste generated as a result of the storage, recycling or disposal of the bridge components, including lead-coated steel. The Contractor shall recycle or reuse the steel in accordance with the Maine Department of Environmental Protection's "Maine Hazardous Waste Management Regulations," Chapter 850. A copy of this regulation is available at MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment and other costs required for proper management of hazardous waste shall be considered incidental to Contract items.

12. The utilities involved in this project are as follows:
 Central Maine Power
 Fairpoint Communications
 Time Warner Cable
 Oxford Networks
 Town of Fairfield Sewer
 Kennebec Water District
 Summit Gas
 Maine Department of Transportation

13. Location of utilities shown are approximate and should be verified in the field by the Contractor.

14. The Contractor shall plan and conduct the work accordingly so that upon final completion of the project there is no drop-off from the edge of shoulder pavement. All remaining or disturbed material on slopes or in ditches on the project shall be capable of attaining a growth of grass that is acceptable according to Standard Specification 618.10. No separate payment will be made for this work.

15. All waste material not used on the project shall be disposed of off the project in waste areas approved by the Resident.

16. No existing drainage shall be abandoned, removed or plugged without prior approval of the Resident.

17. Holes created by guardrail removal will be filled and compacted with approved materials as directed by the resident. Payment to be incidental to the guardrail items.

18. All existing guardrail to be removed shall be removed and stacked and become the property of Maine DOT. Removal and disposal shall be incidental to the guardrail items. The Contractor shall contact Tom Roberts a minimum of 5 working days in advance of proposed delivery to coordinate delivery of materials. Material shall be delivered to Maine Department of Transportation, Fairfield Maintenance Lot, 10 Mountain Road, Fairfield Maine.

19. Connections for proposed guardrail to existing guardrail will be incidental to items 606.23, 606.232.

20. Unless otherwise noted Seeding Method No. 2 will be utilized on all non-guardrail slopes. Seeding Method No. 3 shall be utilized on all guardrail fill slopes.

21. No separate payment for superintendent or foreman will be made for the supervision of equipment being paid for under the equipment rental items.

22. All work shall be done in accordance with the Maine Department of Transportation's Best Management Practices for Erosion Control & Sediment Control, February 2008.

23. Any damage to the slopes caused by the Contractor's equipment, personnel, or operation shall be repaired to the satisfaction of the Resident. All work, equipment, and materials required to make repairs shall be at the Contractor's expense.

24. All dimensions based on or relating to the existing bridges shall be verified in the field by the Contractor.

25. The Contractor shall use care not to damage the existing reinforcing steel which is to remain. Any damaged reinforcing steel shall be replaced as directed by the Resident at no expense to the Department.

26. No separate payment will be made for drilling and anchoring of reinforcing steel, but shall be incidental to related concrete pay item.

27. The Contractor shall locate by non-destructive methods, reinforcing steel in existing concrete before drilling and grouting new reinforcing steel and anchor rods. All costs associated with this work shall be incidental to related contract items.

28. Reinforcing steel shall have 2 inches cover unless otherwise noted.

29. Existing shear connectors shall be removed such that they project 1 inch maximum above the top of the existing top flange unless they conflict with the installation of the new shear connectors or any other work. If the existing shear connectors interfere with installation of the new shear connectors or any other work, they shall be removed completely and ground flush with the top flange. All costs associated with this work shall be incidental to related contract items.

30. Existing concrete at abutments and wingwalls to be removed as shown on the plans shall be sawcut 1 inch deep prior to removing existing concrete. All costs associated with this work shall be incidental to related contract items.

31. All concrete and steel to be removed as shown on the plans shall become the property of the Contractor and disposed off-site at an approved location.

32. Where drilling and anchoring of reinforcement is specified the Contractor shall use a material listed on the Maine Department of Transportation Qualified Products List of Concrete Adhesive Anchor Systems. The depth of embedment shall be sufficient to develop 125% of the yield strength of the bar per the manufacturer's recommendations or 9 inches, whichever is greater. Proposed anchoring material and embedment depth shall be submitted for approval.

33. Aluminum bridge rail which is removed remains the property of the Department and shall be delivered to Maine DOT maintenance lot on Mountain Ave. in Fairfield. Removal, delivery, dismantling, and stacking shall be incidental to item 202.13. The Contractor shall contact Tom Roberts a minimum of 5 working days in advance of the proposed delivery to coordinate delivery of materials.

34. All exposed edges of concrete shall have a 3/4" chamfer unless noted otherwise.

35. All utility support work related to the existing electrical conduit will not be paid directly, but will be considered incidental to the contract.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION																			
	STP-2048(300)																		
	BRIDGE NO. 5819					WIN 20483.00													
BRIDGE PLANS																			

WESTERN AVENUE BRIDGE INTERSTATE 95 FAIRFIELD SOMERSET COUNTY	PROJ. MANAGER	M. Parlin	BY	DATE				
	DESIGN-DETAILED	JDW	PEB	05/15	SIGNATURE			
GENERAL NOTES	CHECKED-REVIEWED	KEB	TRC	05/15				
	DESIGN-DETAILED	-	-	-	P.E. NUMBER			
	DESIGN-DETAILED	-	-	-	DATE			
	REVISIONS 1	-	-	-				
	REVISIONS 2	-	-	-				
	REVISIONS 3	-	-	-				
	REVISIONS 4	-	-	-				
	FIELD CHANGES	-	-	-				

SHEET NUMBER
3
OF 33

Date:6/4/2015

Username:

Division:

Filename: 004_HDP\an01.dgn

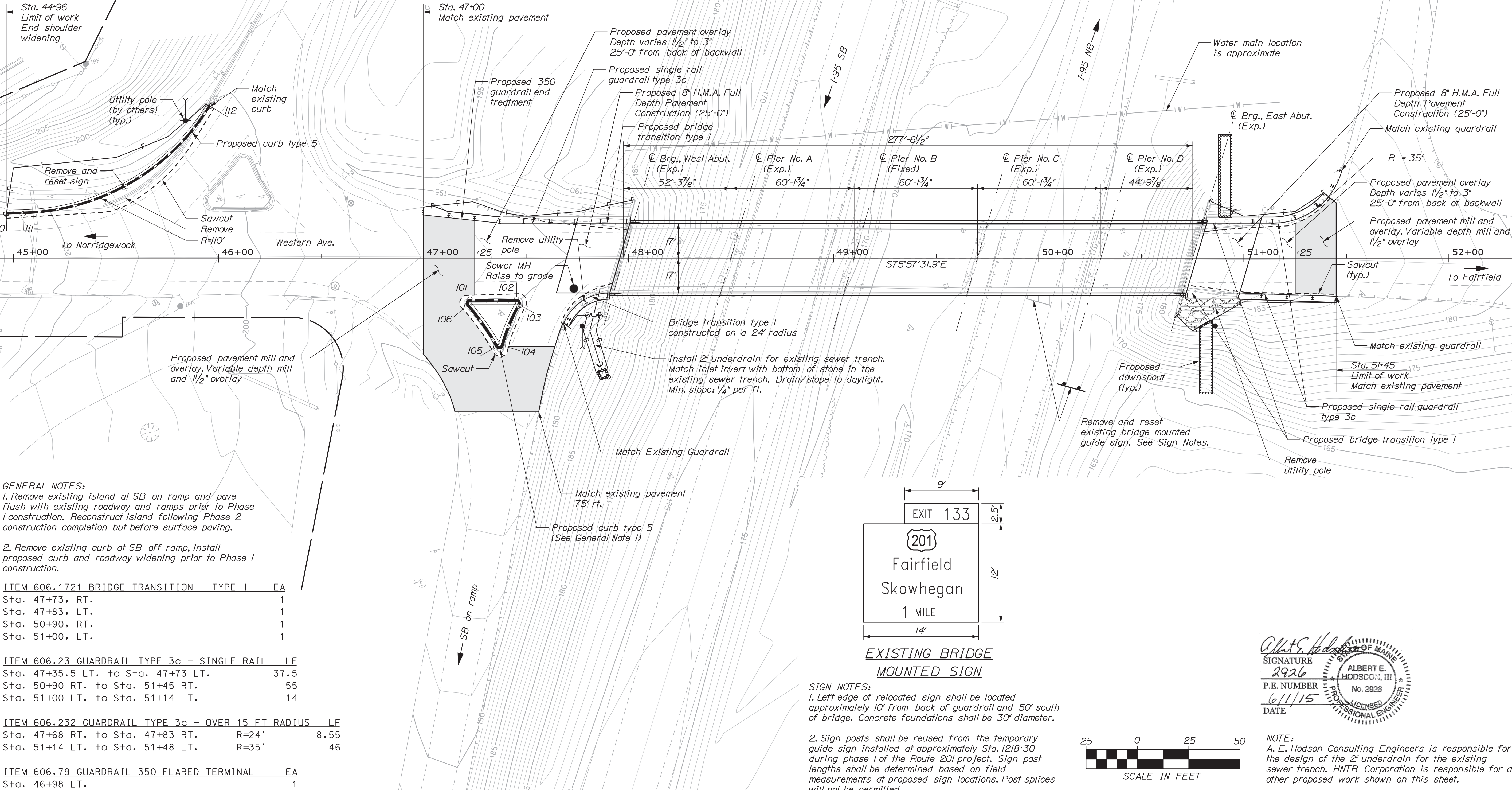
ITEM 609.34 CURB TYPE 5			LF
POINT	LENGTH	RADIUS	
101 TO 102	22.69		
103 TO 104	21.54		
105 TO 106	24.54		
110 TO 111	8.25		
111 TO 112	109.80		

ITEM 609.34 CURB TYPE 5 - CIRCULAR			LF
POINT	LENGTH	RADIUS	
101 TO 106	4.55	2.00	
102 TO 103	4.15	2.00	
104 TO 105	4.68	2.00	

ITEM 610.08 PLAIN RIPRAP			CY
Sta. 50+67 TO Sta. 51+00 RT. (slope stab.)			19
Sta. 50+82 RT. (downspout)			13
Sta. 50+91 LT. (downspout)			15

CONTROL POINTS FOR CURBING		
POINT	STATION	OFFSET
101	47+22.62	20.00, RT.
102	47+45.30	20.00, RT.
103	47+47.05	22.97, RT.
104	47+38.88	42.84, RT.
105	47+35.23	43.31, RT.
106	47+21.09	23.29, RT.
110	44+96.48	21.38, LT.
111	45+04.72	21.56, LT.
112	45+96.05	73.95, LT.

ITEM 627.733 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE			LF
Sta. 42+40 to Sta. 57+25	DYCL		1485
Sta. 42+40 to Sta. 57+25, Lt.	SWEL		1428
Sta. 42+40 to Sta. 57+25, Rt.	SWEL		1405
Southbound On Ramp	SYEL		100
Southbound On Ramp	SWEL		70



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2048(300)

BRIDGE NO. 5819
WIN
20483.00

BRIDGE PLANS

WESTERN AVENUE BRIDGE
INTERSTATE 95
FAIRFIELD

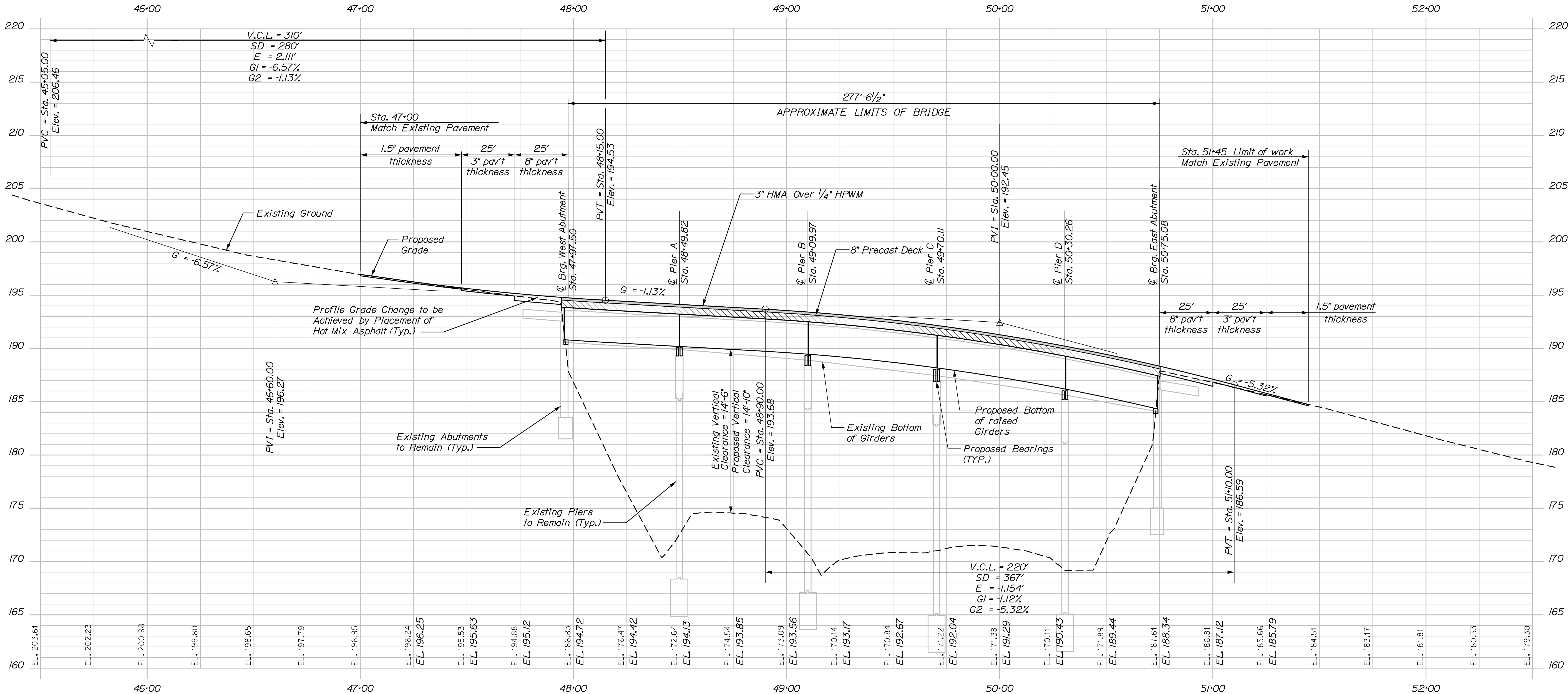
SOMERSET COUNTY

GENERAL PLAN

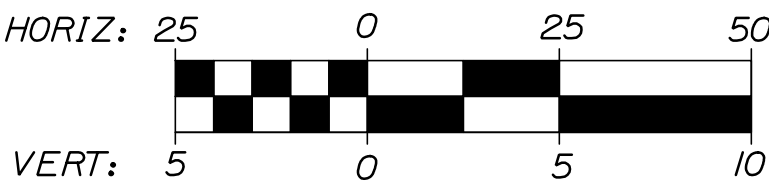
SHEET NUMBER

4

OF 33



PROFILE



WESTERN AVENUE BRIDGE
INTERSTATE 95
FAIRFIELD SOMERSET COUNTY

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2048(300)

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	LZD	MPC	05/15
CHECKED-REVIEWED	DAM	TRC	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SHEET NUMBER

5

OF 33

PROFILE

BRIDGE NO. 5819
WIN
20483.00

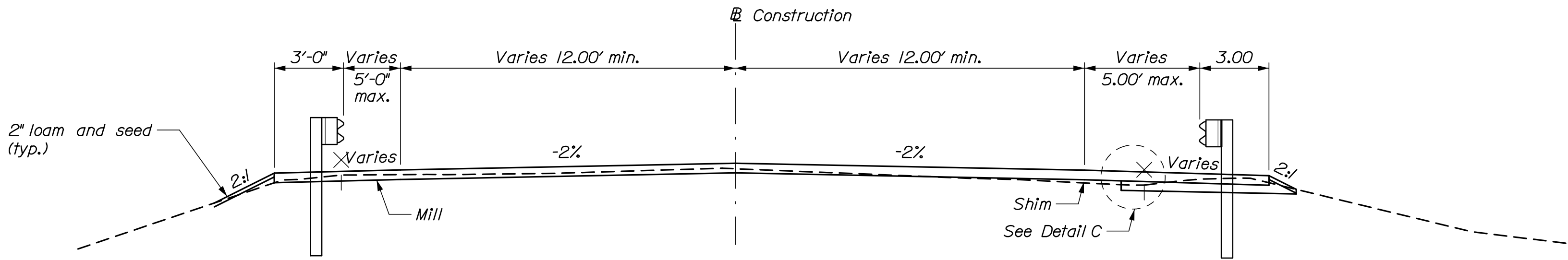
BRIDGE PLANS

Date:6/18/2015

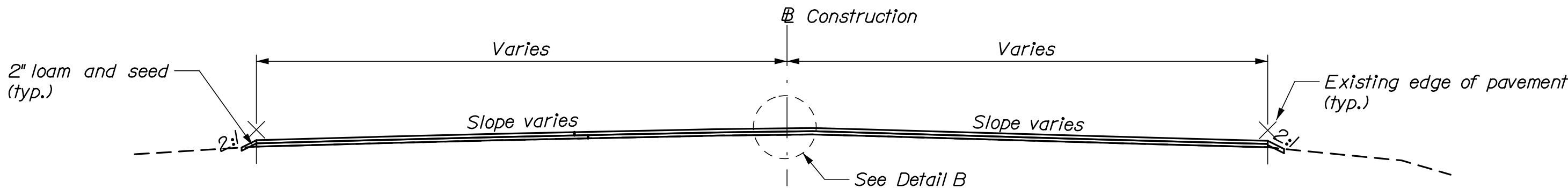
Username:

Division:

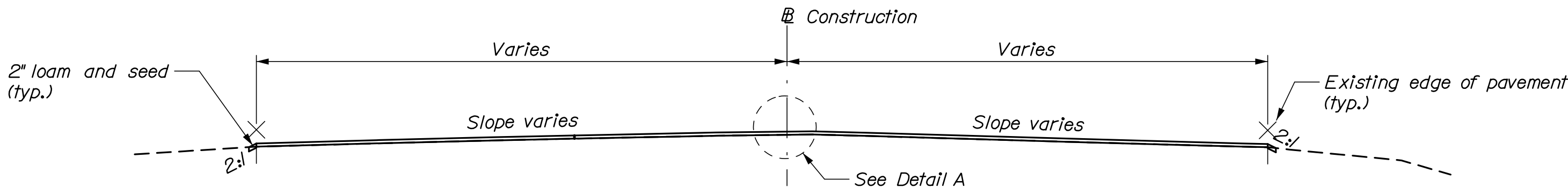
Filename: 006_WATyp.dgn



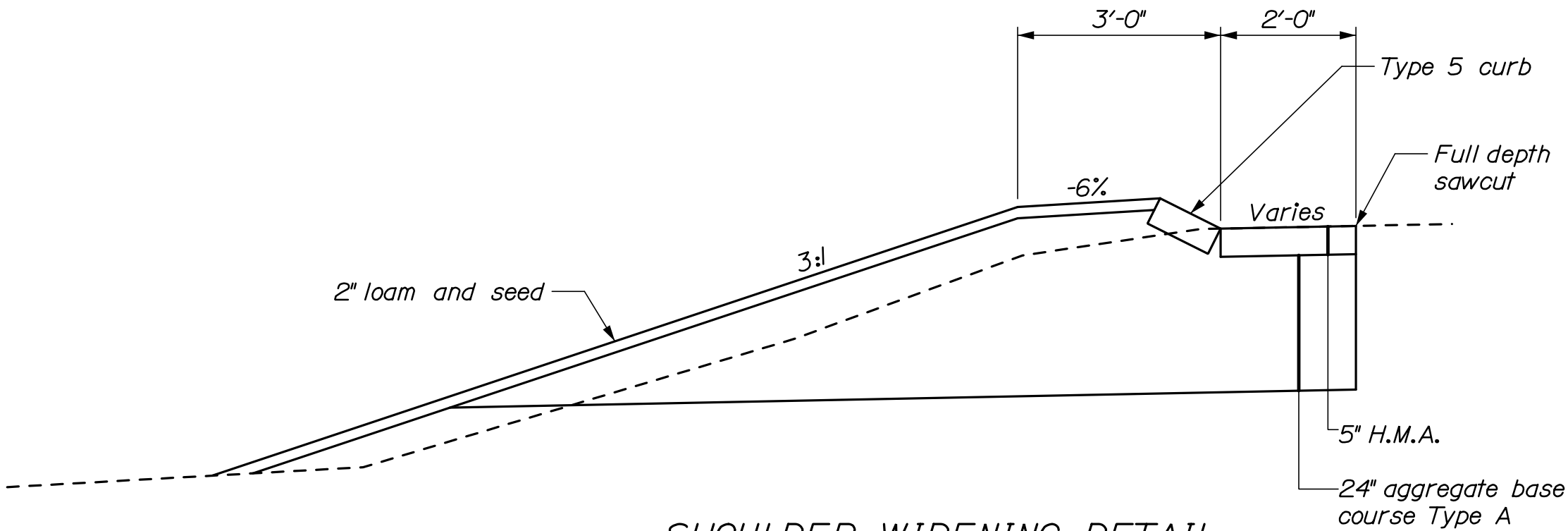
PROPOSED APPROACH
APPROACH OVERLAY AT BRIDGE ABUTMENT



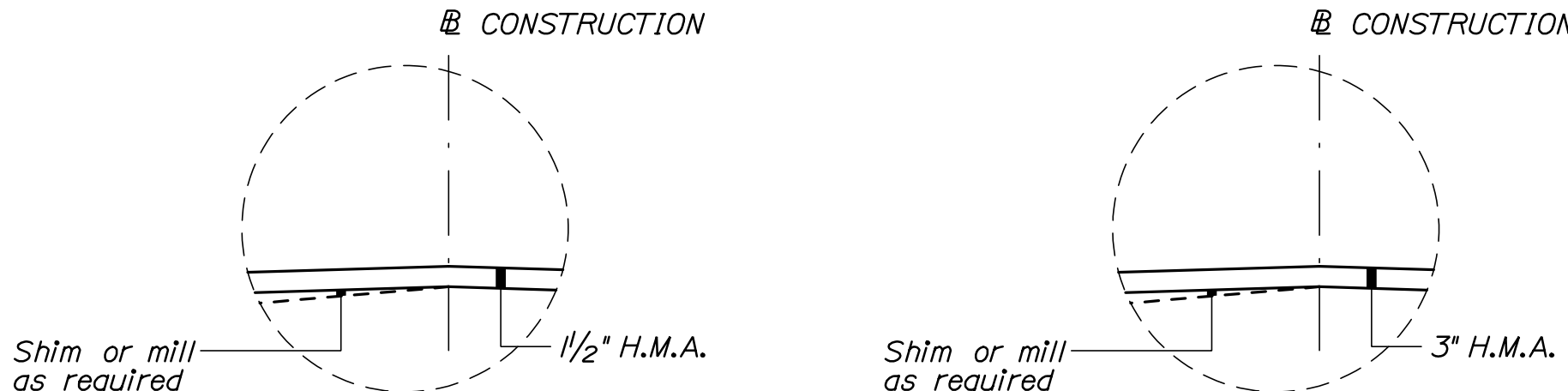
PROPOSED APPROACH
APPROACH OVERLAY



PROPOSED APPROACH
APPROACH OVERLAY AT LIMIT OF WORK

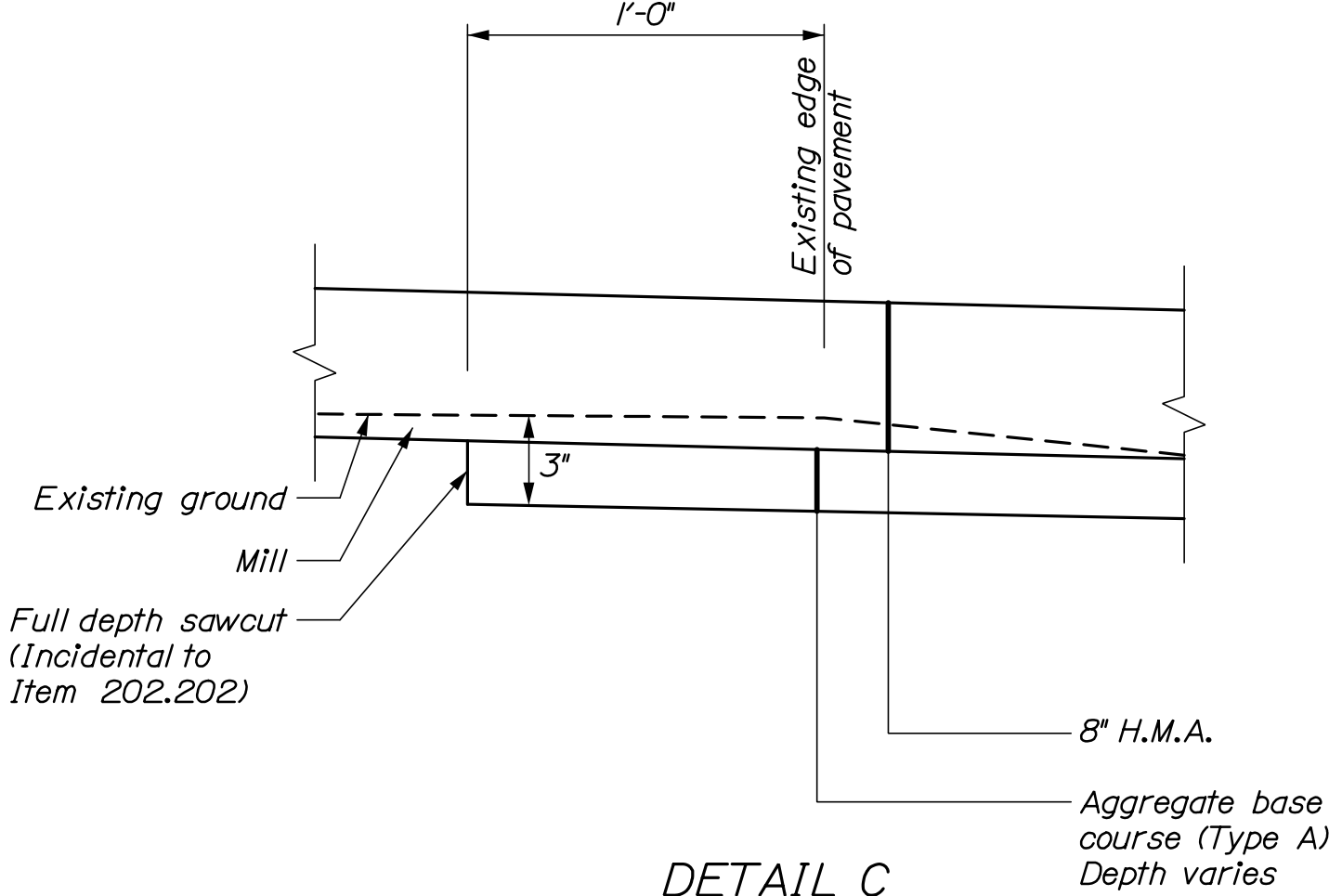


SHOULDER WIDENING DETAIL
(AT SOUTHBOUND OFF-RAMP)

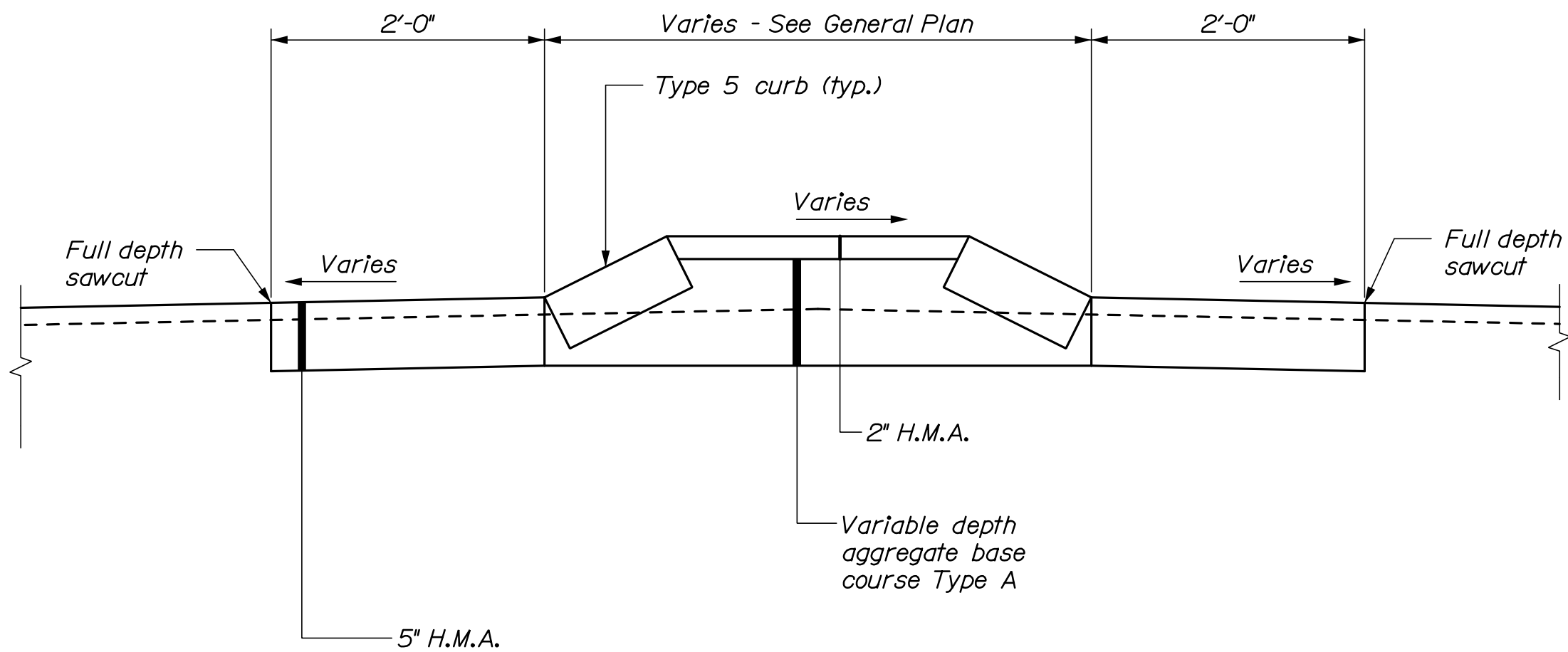


DETAIL A

DETAIL B



DETAIL C



RAISED ISLAND DETAIL
(AT SOUTHBOUND ON-RAMP)

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	STP-2048(300)	BRIDGE NO. 6819	WIN 20483.00	BRIDGE PLANS
--	---------------	-----------------	-----------------	--------------

PROJ. MANAGER	DESIGN-DETAILED	BY	DATE	SIGNATURE
M. Parlin	L7D	MPC	05/15	
CHECKED-REVIEWED	DAM	TRC	05/15	
DESIGN-DETAILED				
REVISIONS 1				P.E. NUMBER
REVISIONS 2				
REVISIONS 3				DATE
REVISIONS 4				
FIELD CHANGES				

WESTERN AVENUE BRIDGE INTERSTATE 95 FAIRFIELD SOMERSET COUNTY	TYPICAL SECTIONS
--	------------------

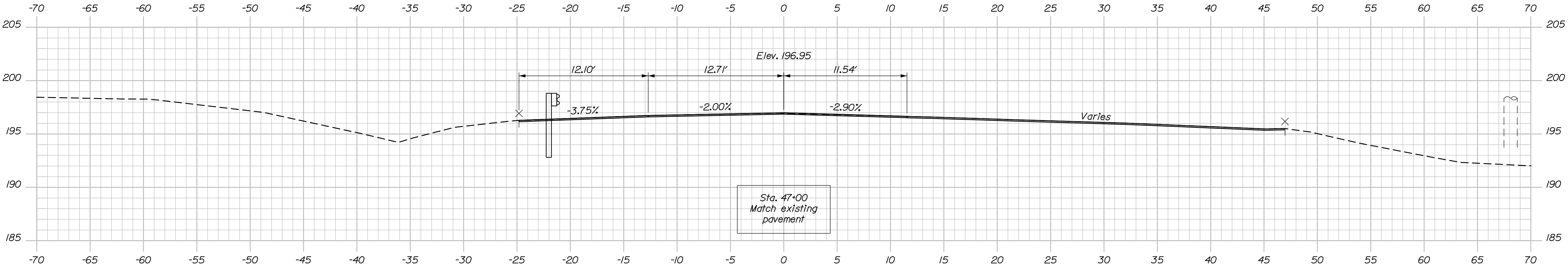
SHEET NUMBER 6 OF 33

Date:6/18/2015

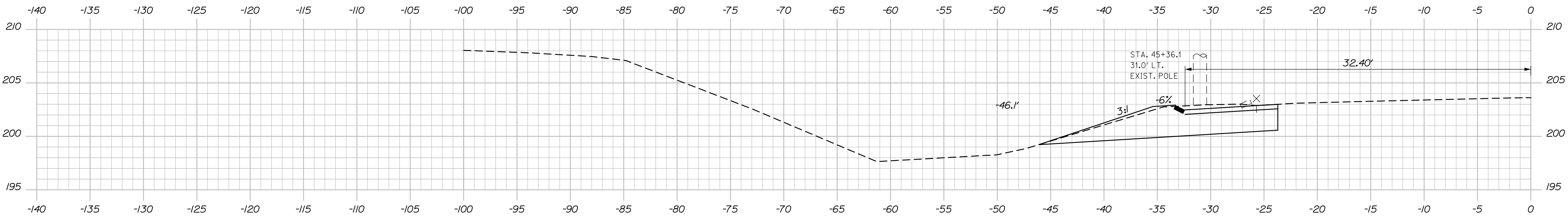
Username:

Division:

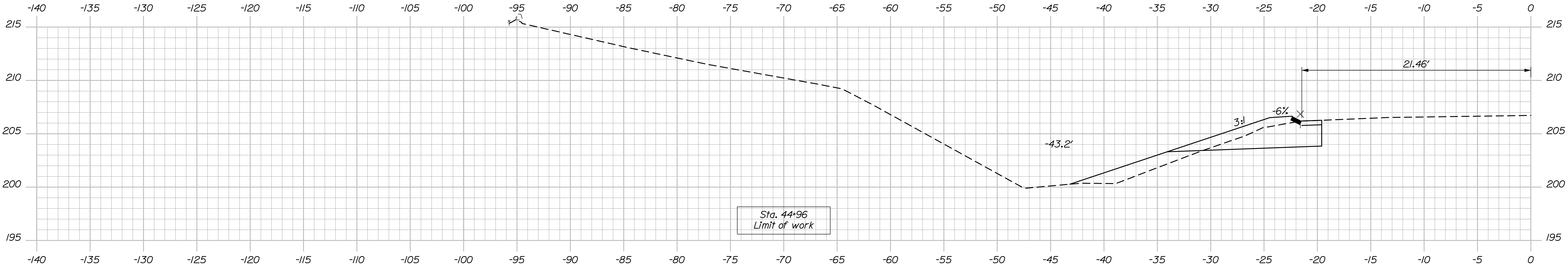
Filename: xssect.dgn



47+00.00



45+50.00



45+00.00

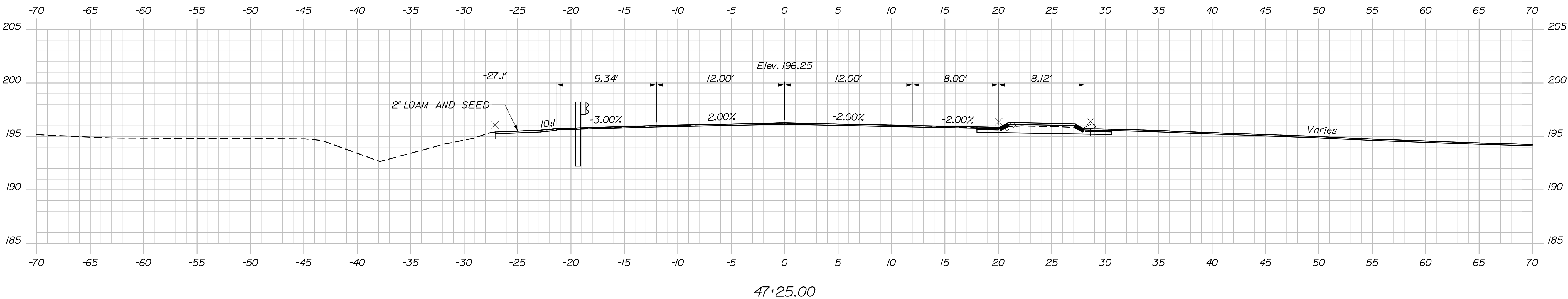
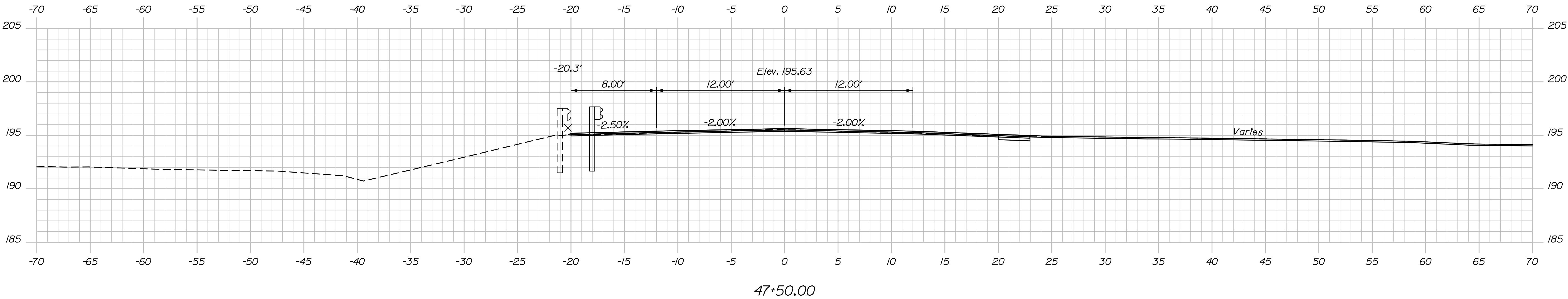
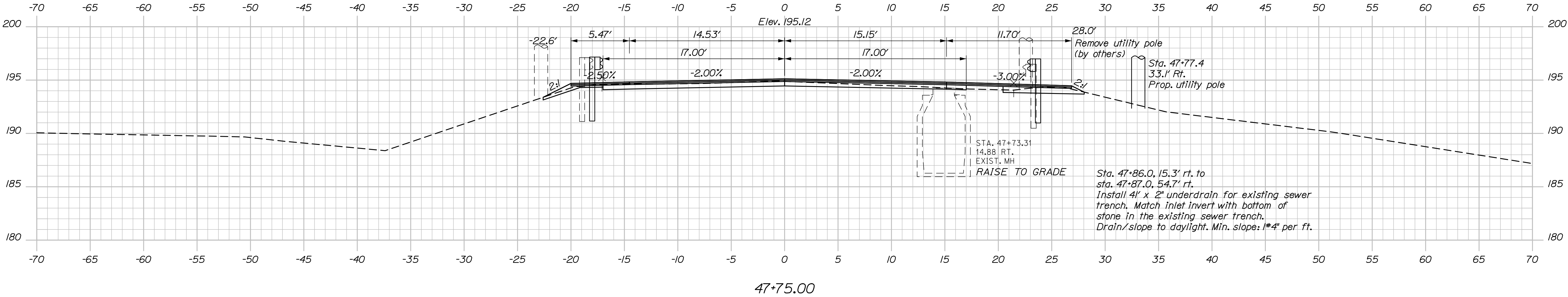
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
STP-2048(300)		SIGNATURE	
WIN		P.E. NUMBER	
20483.00		DATE	
BRIDGE NO. 5819		FIELD CHANGES	
WESTERN AVENUE BRIDGE		SOMERSET COUNTY	
INTERSTATE 95		CROSS SECTIONS	
FAIRFIELD		SHEET NUMBER	
OF 33		2	

Date:6/18/2015

Username:

Division:

Filename: xsect.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2048(300)

BRIDGE NO. 6819
WIN
20483.00
BRIDGE PLANS

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	LTD	MPC	05/15
CHECKED-REVIEWED	DAM	TFC	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

WESTERN AVENUE BRIDGE
INTERSTATE 95
FAIRFIELD
SOMERSET COUNTY

SHEET NUMBER
8
OF 33

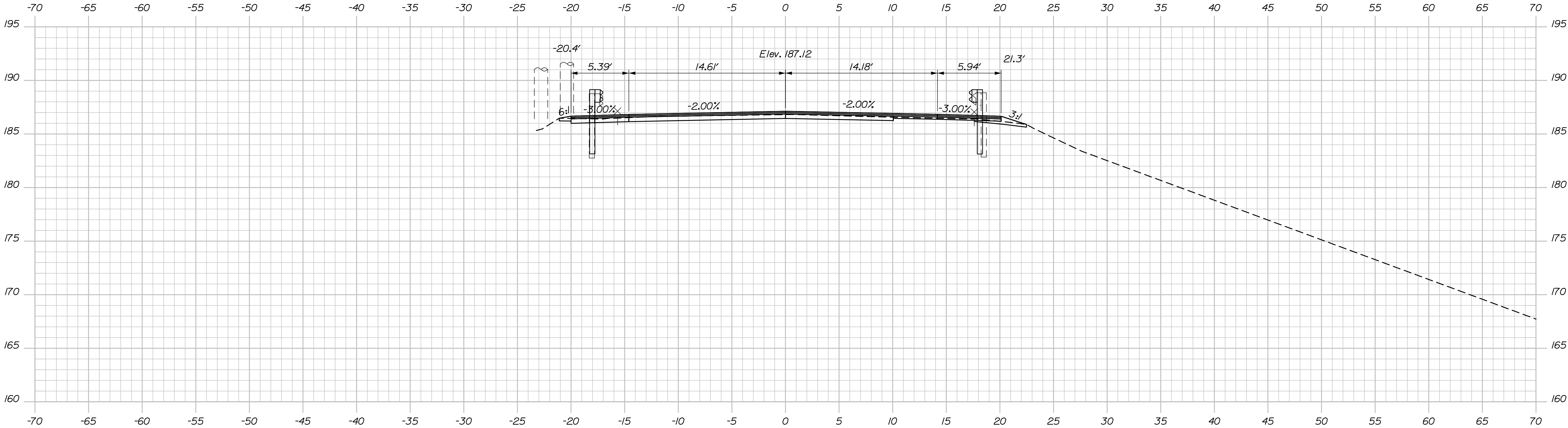
CROSS SECTIONS

Date:6/18/2015

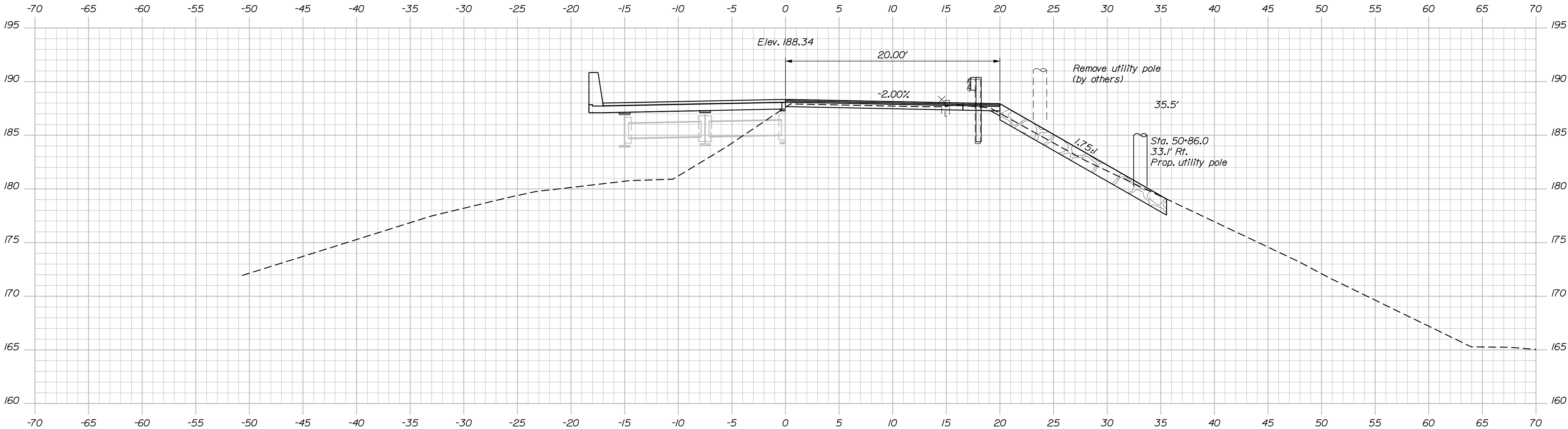
Username:

Division:

Filename: xssect.dgn



51+00.00



50+75.00

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		
	STP-2048(300)	
	BRIDGE NO. 6819	WIN 20483.00

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	LTD	MPC	05/15
CHECKED-REVIEWED	DAM	TRC	05/15
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

WESTERN AVENUE BRIDGE INTERSTATE 95 FAIRFIELD SOMERSET COUNTY	
CROSS SECTIONS	

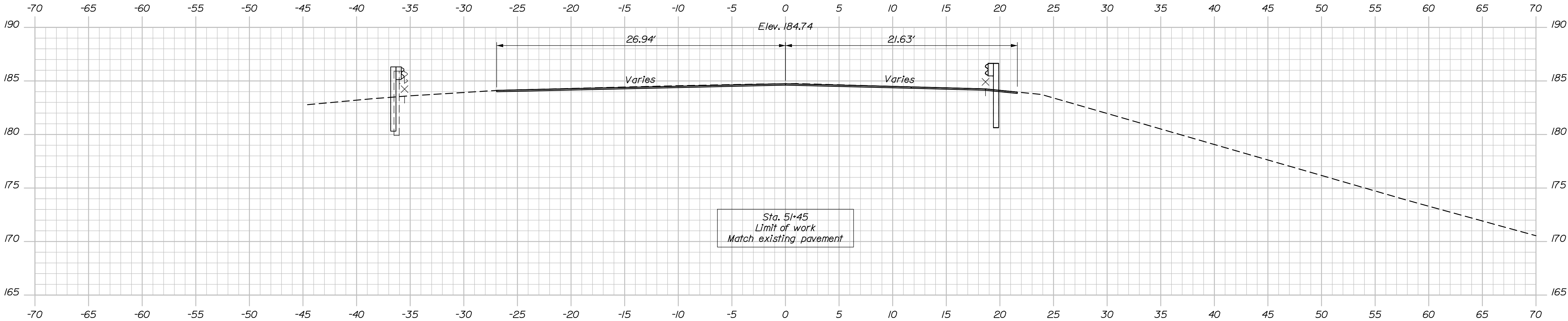
SHEET NUMBER
9
OF 33

Date:6/18/2015

Username:

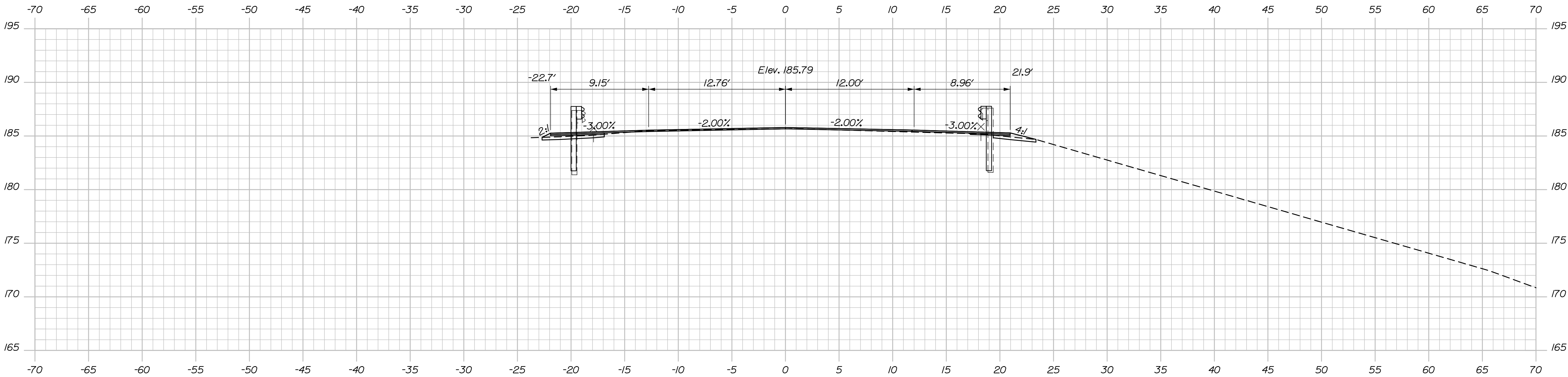
Division:

Filename: xssect.dgn



Sta. 51+45
Limit of work
Match existing pavement

51+45.00



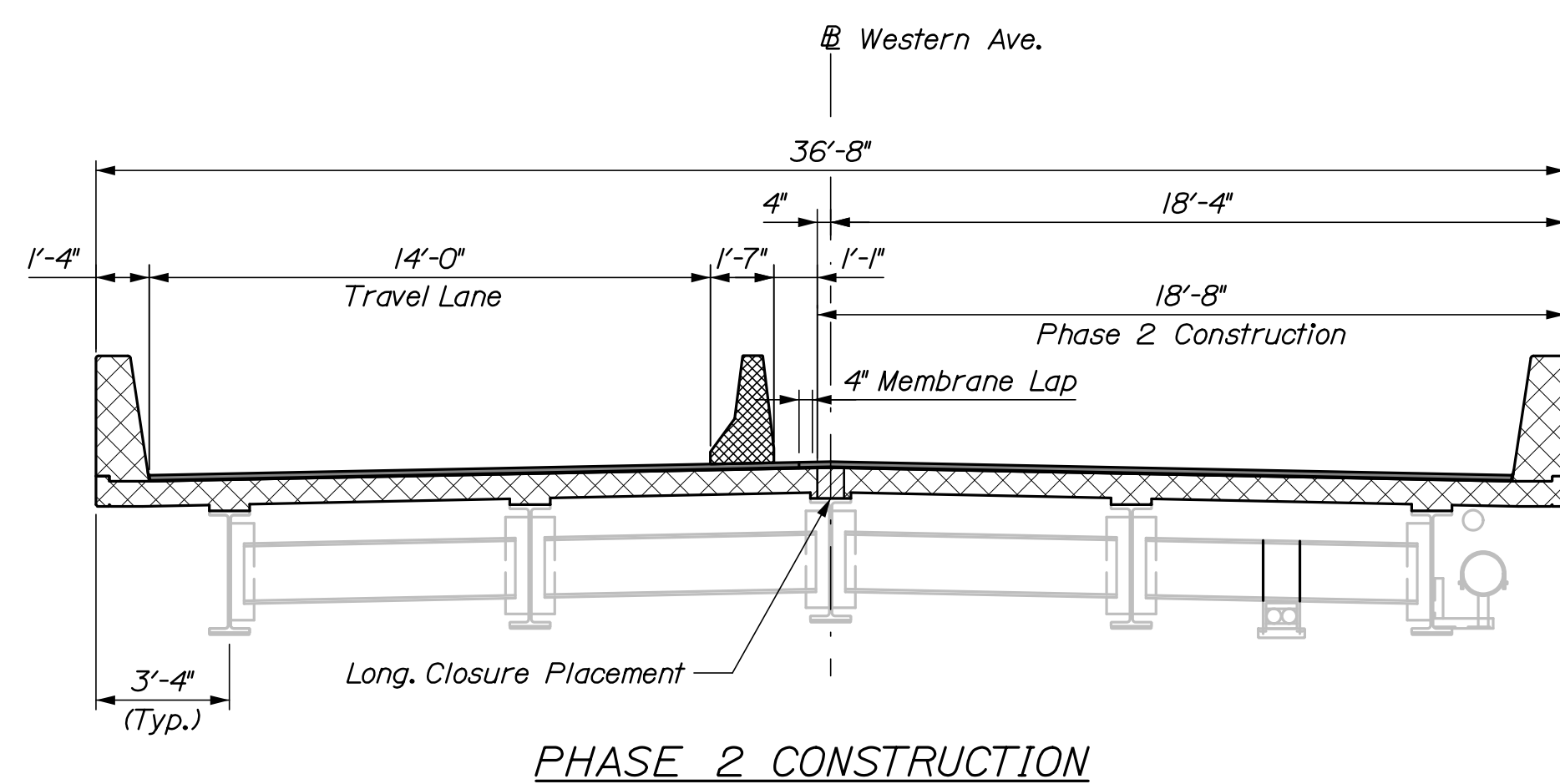
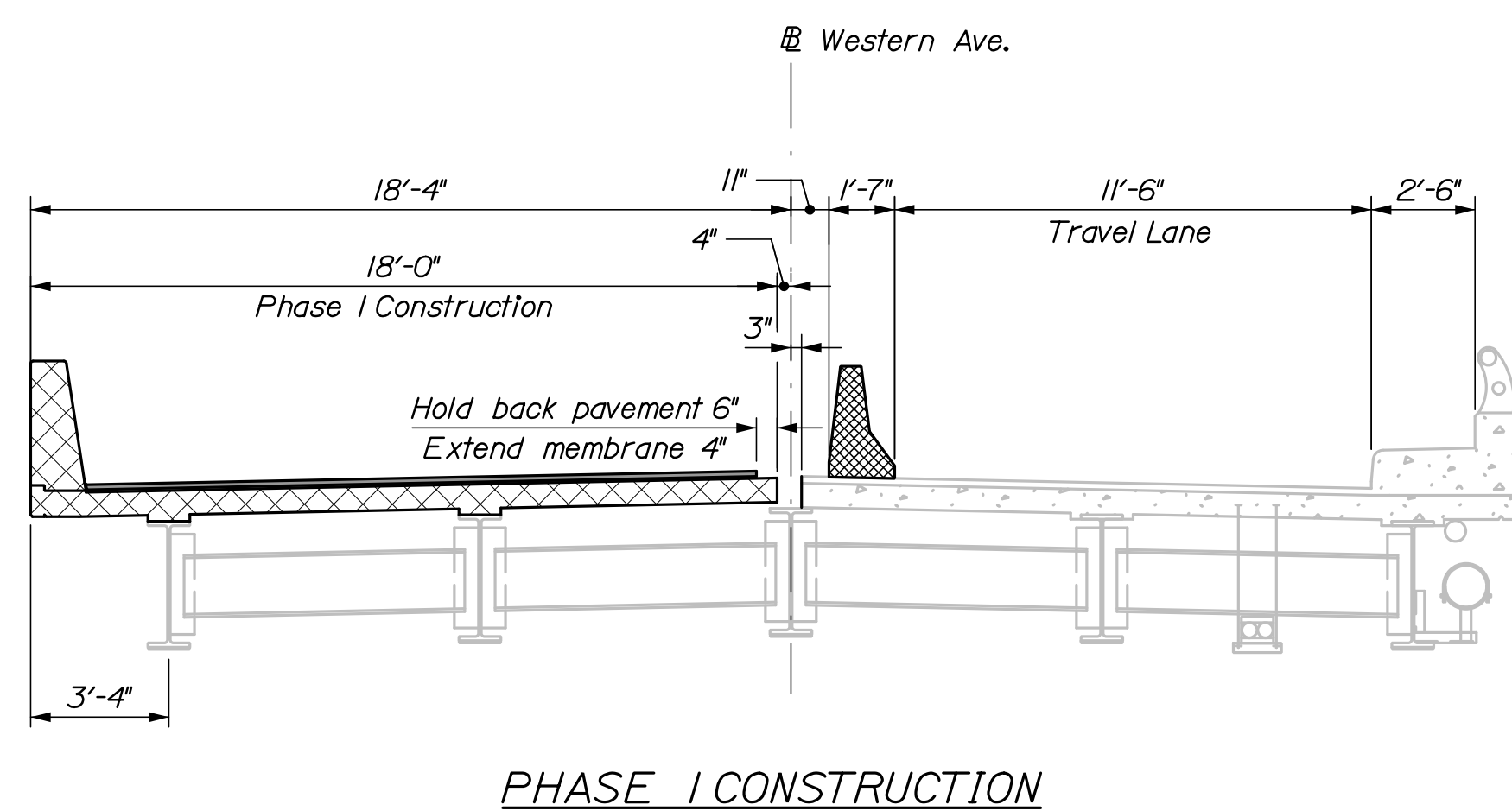
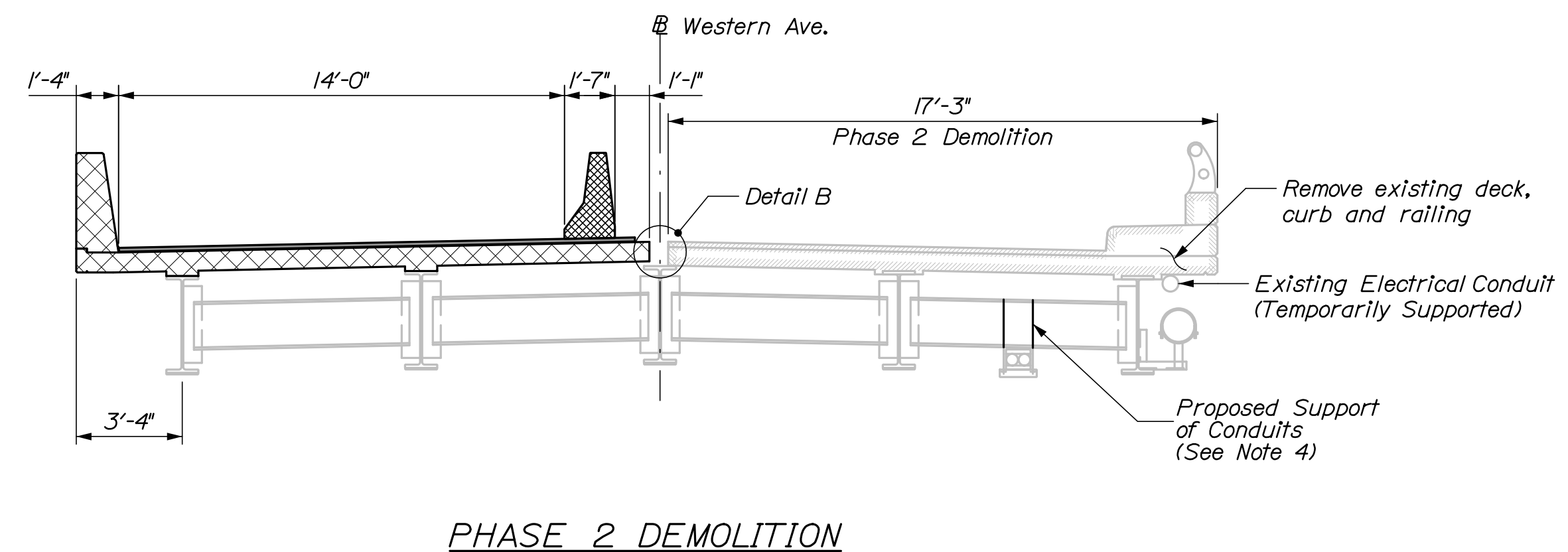
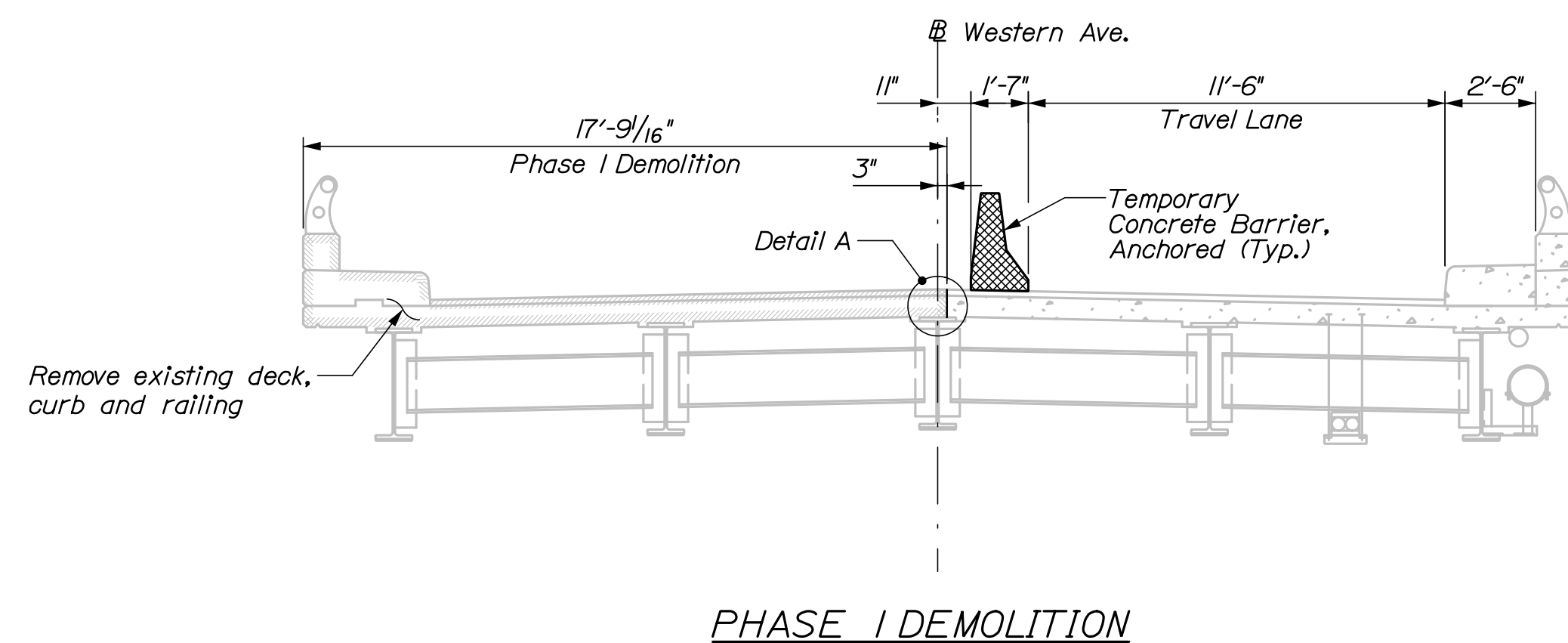
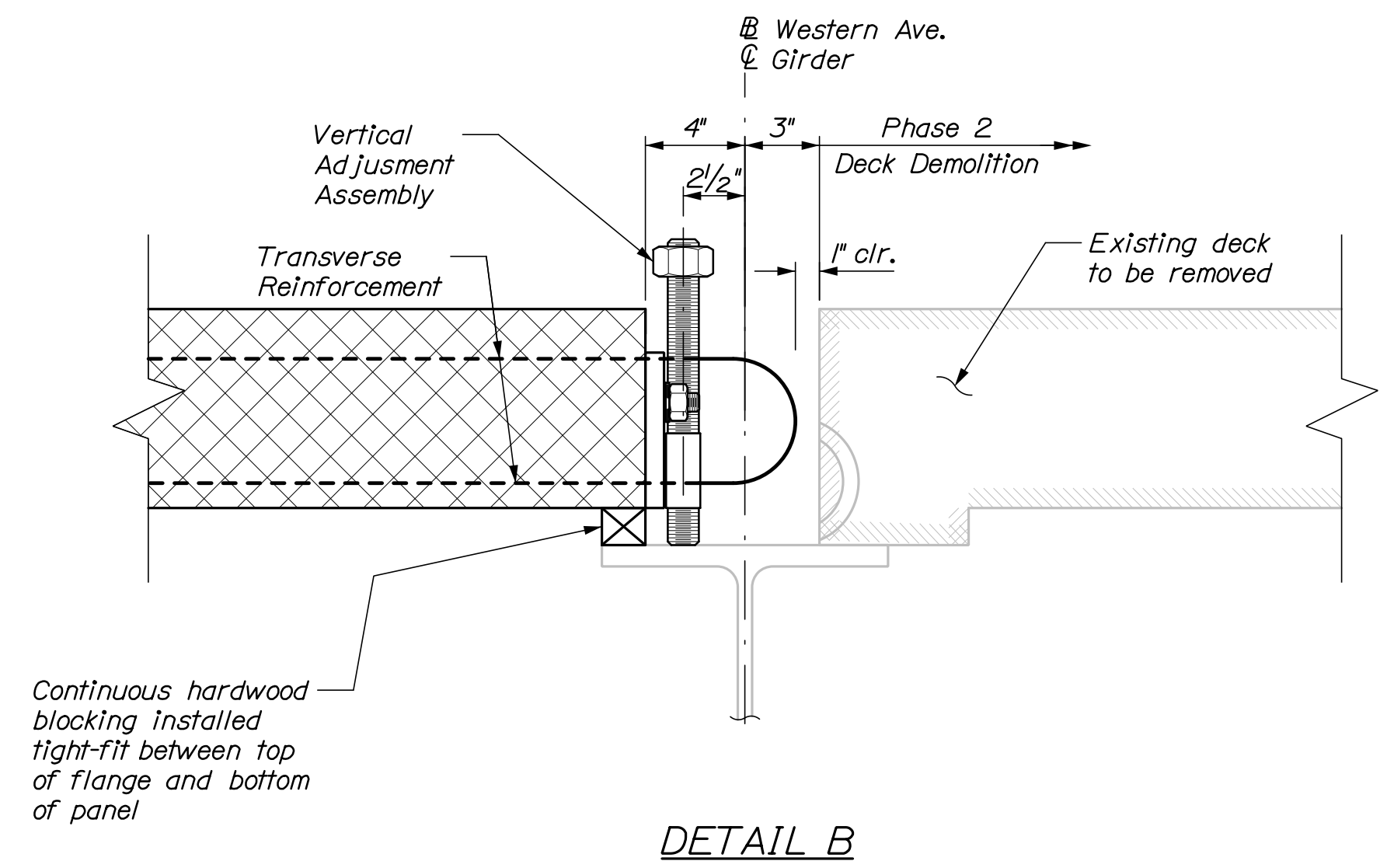
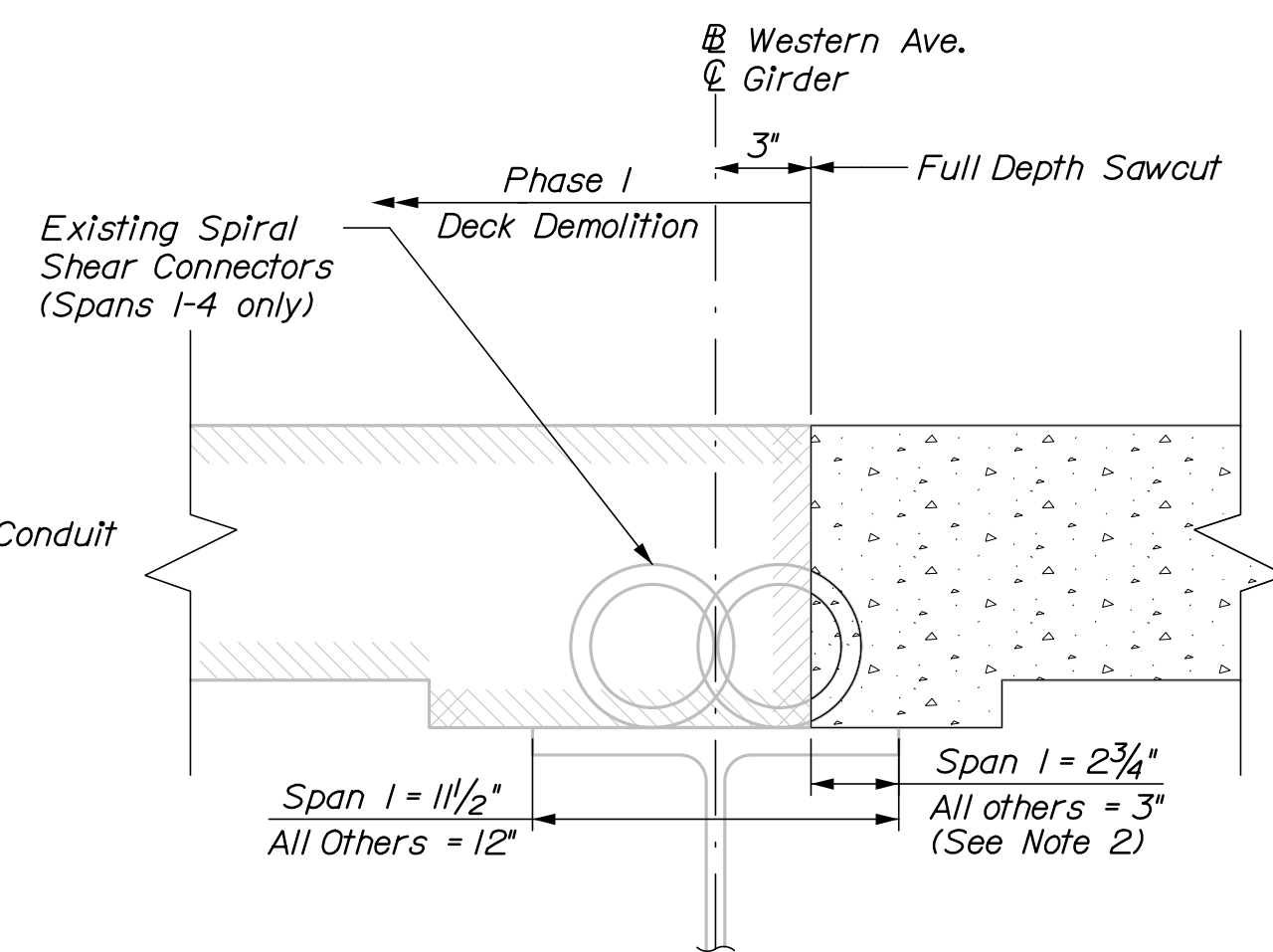
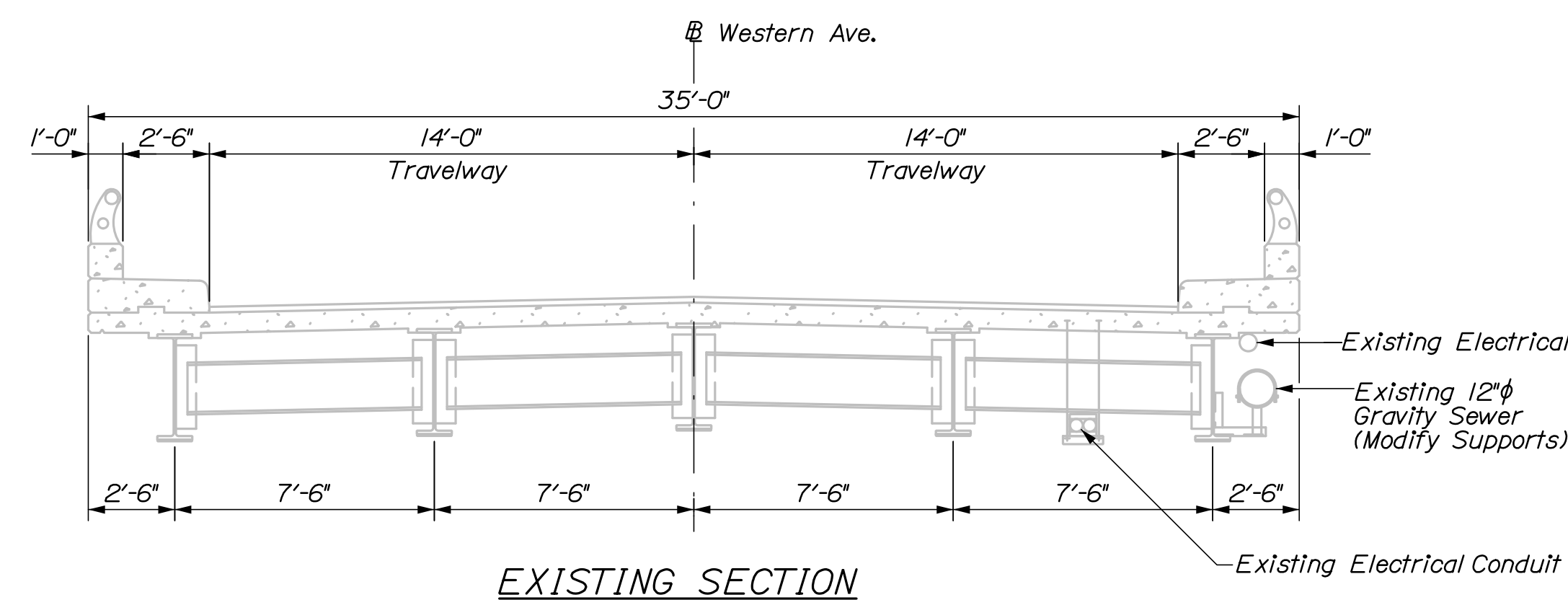
51+25.00

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	LTD	MPC	05/15
CHECKED-REVIEWED	DAM	TRC	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE



Notes:

1. Bridge shall be jacked and bearings replaced prior to phase 1 demolition. Temporary girder connection plate shall be installed prior to start of jacking operations and shall not be removed prior to completion of phase 2 construction.

2. The Contractor shall be responsible for accurately field locating the proposed sawcut line. Sawcut shall be within $\pm 1/2"$ of location shown.

3. Final surface pavement shall be completed following completion of phase 2 construction.

4. Conduit supports shall be transitioned to diaphragms. Spacing of supports at a minimum shall match the existing support spacing.

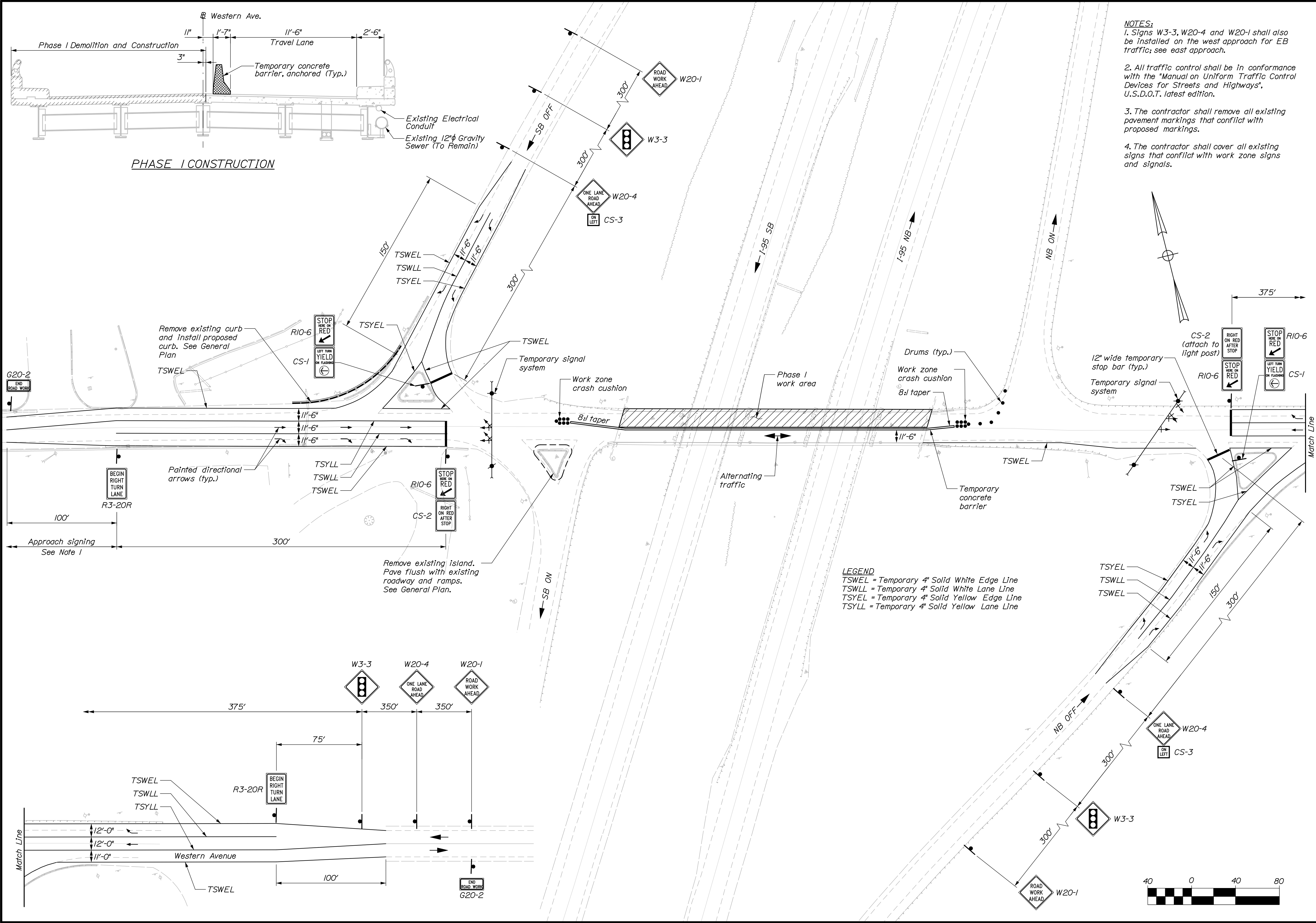
WESTERN AVENUE BRIDGE INTERSTATE 95 FAIRFIELD SOMERSET COUNTY CONSTRUCTION STAGING SECTIONS	PROJ. MANAGER		M. Parlin	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION STP-2048(300) WIN 20483.00 BRIDGE NO. 5819 BRIDGE PLANS
	DESIGN-DETAILED		J.D.W.	PEB	05/15	
	CHECKED-REVIEWED		KEB	TRC	05/15	
	DESIGNS-DETAILED		D2	-	-	
	SIGNATURE					
	DESIGNS-DETAILED		D3	-	-	
	P.E. NUMBER					
	REVISIONS 1					
	REVISIONS 2					
	REVISIONS 3					
REVISIONS 4						
FIELD CHANGES						
DATE						

Date:6/18/2015

Username:

Division:

Filename: 012_WA-MOTPhase1.dgn



- NOTES:**
1. Signs W3-3, W20-4 and W20-1 shall also be installed on the west approach for EB traffic; see east approach.
 2. All traffic control shall be in conformance with the "Manual on Uniform Traffic Control Devices for Streets and Highways", U.S.D.O.T. latest edition.
 3. The contractor shall remove all existing pavement markings that conflict with proposed markings.
 4. The contractor shall cover all existing signs that conflict with work zone signs and signals.

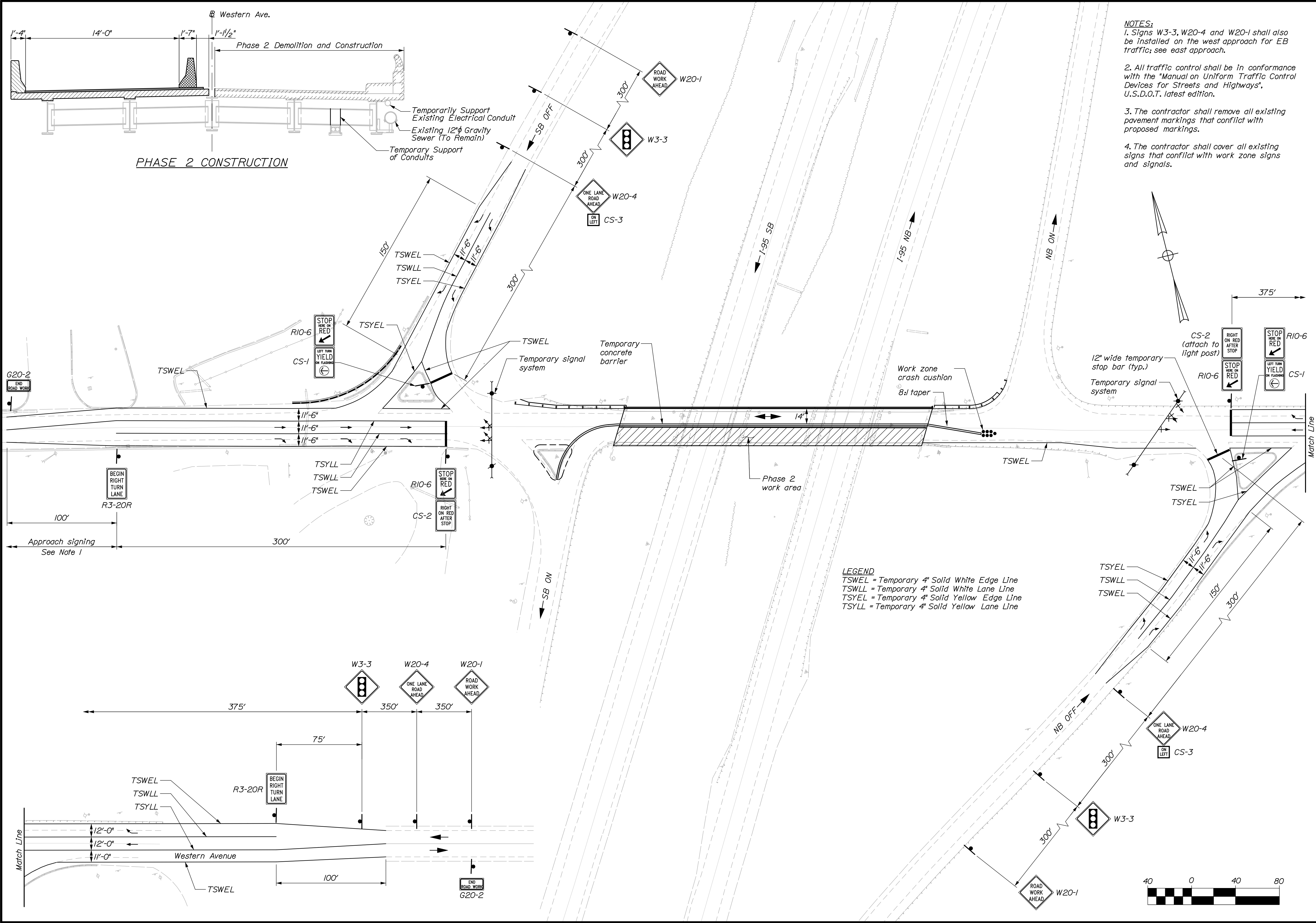
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
FAIRFIELD		SOMERSET COUNTY	
WESTERN AVENUE BRIDGE		INTERSTATE 95	
MAINTENANCE OF TRAFFIC		PHASE 1	
SHEET NUMBER		12	
OF 33		STP-2048(300)	
BRIDGE NO. 5819		WIN	
20483.00		BRIDGE PLANS	

Date:6/18/2015

Username:

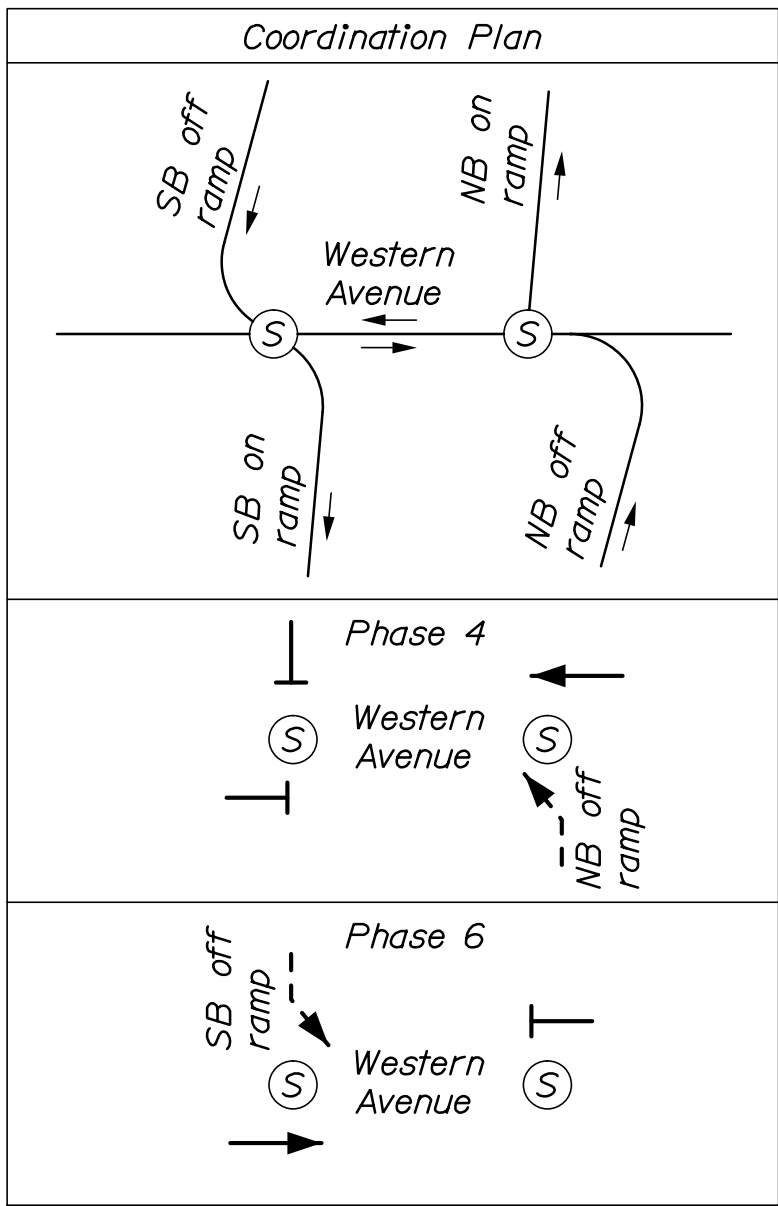
Division:

Filename: 013_WA-MOTPhase2.dgn



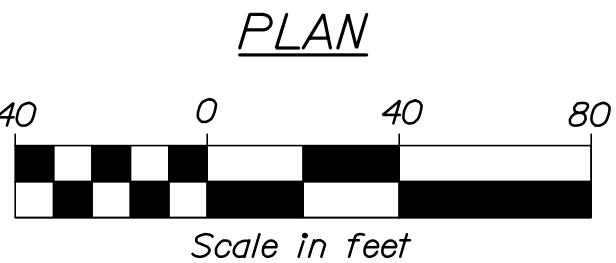
- NOTES:**
1. Signs W3-3, W20-4 and W20-1 shall also be installed on the west approach for EB traffic; see east approach.
 2. All traffic control shall be in conformance with the "Manual on Uniform Traffic Control Devices for Streets and Highways", U.S.D.O.T. latest edition.
 3. The contractor shall remove all existing pavement markings that conflict with proposed markings.
 4. The contractor shall cover all existing signs that conflict with work zone signs and signals.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-2048(300)		BRIDGE PLANS	
WESTERN AVENUE BRIDGE		FAIRFIELD		SOMERSET COUNTY		SHEET NUMBER	
INTERSTATE 95		MAINTENANCE OF TRAFFIC		PHASE 2		13	
DATE		BY		SIGNATURE		P.E. NUMBER	
05/15	05/15	MPC	TRC				
DESIGNED-DETAILED	LZO	DESIGNED-DETAILED	DESIGNED-DETAILED	DESIGNED-DETAILED	DESIGNED-DETAILED	DESIGNED-DETAILED	DESIGNED-DETAILED
REVISIONS 1							
REVISIONS 2							
REVISIONS 3							
REVISIONS 4							
FIELD CHANGES							
BRIDGE NO. 5819		WIN		20483.00		OF 33	



Equipment Schedule			
Designation	Item	Description	Location*
1	Temporary proposed span wire pole with guy wire	Includes mounted vehicle detection	
2	Temporary proposed span wire pole with guy wire		
3	Temporary proposed span wire pole with guy wire	Includes mounted vehicle detection	
4	Temporary proposed span wire pole with guy wire		
5	Temporary signal cabinet with controller, mounted on pole 4	Both intersections shall operate off of a single controller	

* Location may be field adjusted as needed with permission of MaineDOT or resident



Signal Timing Schedule (Seconds) - Free Plan								
	1	2	3	4	5	6	7	8
Minimum green	-	-	-	6	-	6	-	-
Extension				3	-	3	-	-
Max.				42	-	29.5		
Veh Clear				3.5	-	4.5		
Red Clear				23.5	-	20.0		
Walk				*	-	*		
Ped Clear				*	-	*		
Recall				MIN	-	MIN		

* Timing to be field adjusted per MaineDOT or residents direction. This shall be done for the weekday a.m. and p.m. peak hours at a minimum.

* Flashing yellow arrow for southbound off-ramp to show with phase 6 green. Flashing yellow arrow for northbound off-ramp to show with phase 4 green. Phasing as shown below.

- TRAFFIC SIGNAL NOTES**
1. All materials and work shall conform to the MaineDOT Standard Specifications and be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways", F.H.W.A. latest edition.
 2. Traffic signal work shall be completed in a manner and order that will cause the minimum disruption to traffic.
 3. The resident and MaineDOT shall have the right and authority to determine the acceptability of work and materials in progress or completed and shall have the right to reject any work or materials which do not conform, in its sole opinion, to the plans or specifications.
 4. The contractor is responsible for field adjusting timing under the direction of the resident or MaineDOT.
 5. All new signal sections shall have LED lenses 12 inches in diameter with 5" louvered back plate.
 6. The bottom of housing of new signal faces or tether wire shall be at least 16 feet but not more than 19 feet above the pavement grade at the center of the roadway.
 7. The contractor shall be responsible for obtaining any necessary street/sidewalk occupancy or opening permits.
 8. All conflicting signs and pavement markings shall be covered or removed until project completion.
 9. The temporary signal controller cabinet shall be pole mounted.

WESTERN AVENUE BRIDGE
INTERSTATE 95
FAIRFIELD SOMERSET COUNTY

TEMPORARY SIGNAL PLAN

SHEET NUMBER

14

OF 33

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2048(300)

BRIDGE NO. 6819 WIN 20483.00

BRIDGE PLANS

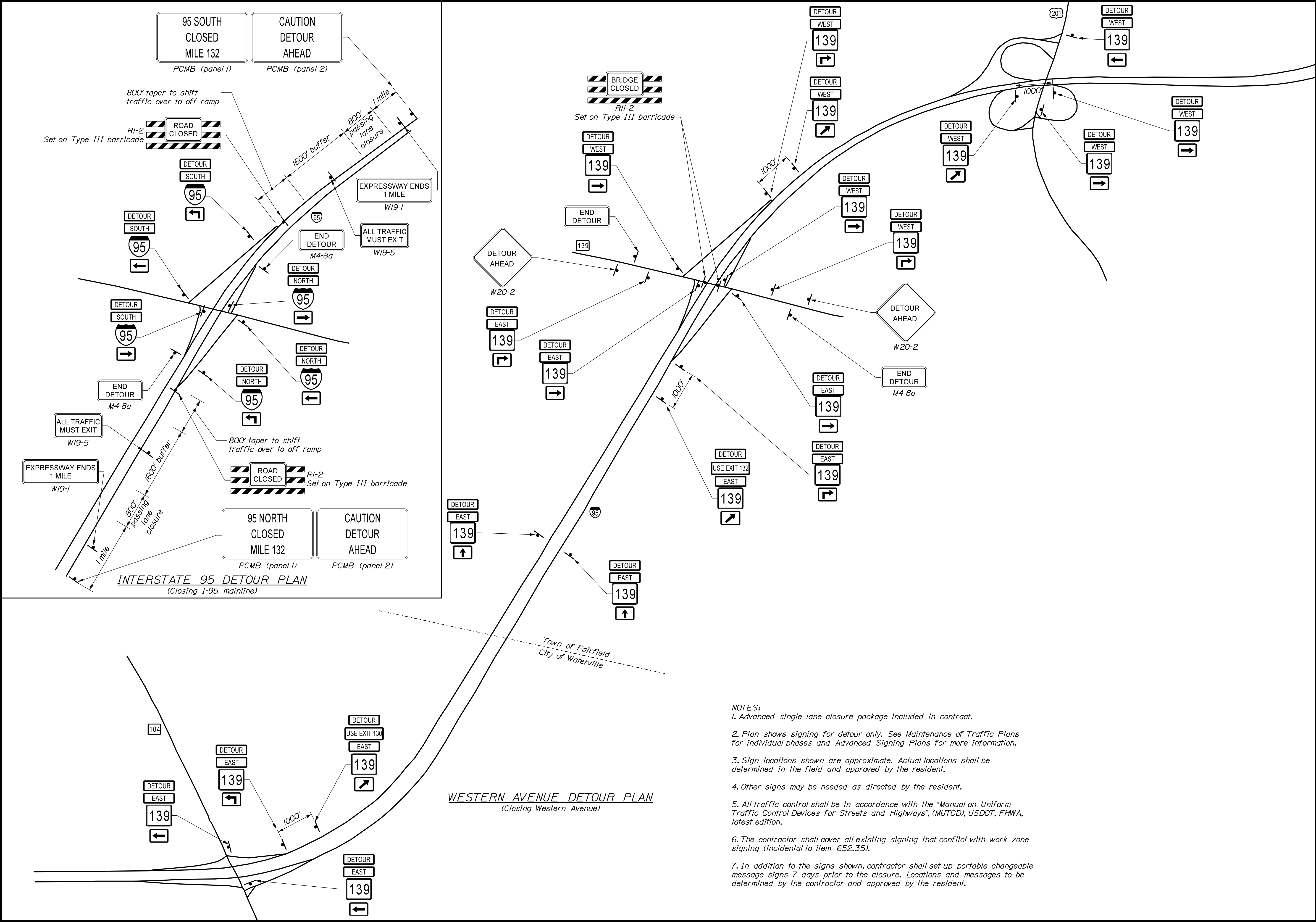
PROJ. MANAGER	DATE	BY	SIGNATURE
DESIGN-DETAILED LZO	05/15	MPC	
CHECKED-REVIEWED DAM	05/15	TRC	
DESIGN-DETAILED	-	-	
DESIGN-DETAILED	-	-	
REVISIONS 1	-	-	
REVISIONS 2	-	-	
REVISIONS 3	-	-	
REVISIONS 4	-	-	
FIELD CHANGES	-	-	

Date:6/18/2015

Username:

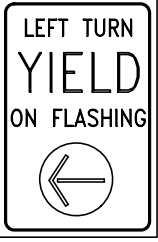
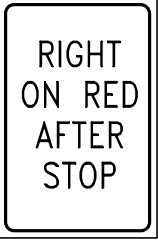

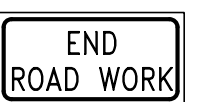






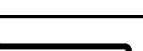
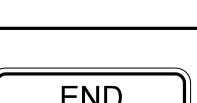








Division:








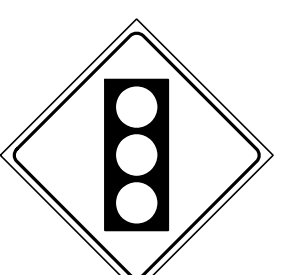

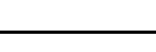
Filename: 015_DetourPlan.dgn



- NOTES:
- Advanced single lane closure package included in contract.
 - Plan shows signing for detour only. See Maintenance of Traffic Plans for individual phases and Advanced Signing Plans for more information.
 - Sign locations shown are approximate. Actual locations shall be determined in the field and approved by the resident.
 - Other signs may be needed as directed by the resident.
 - All traffic control shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways", (MUTCD), USDOT, FHWA, latest edition.
 - The contractor shall cover all existing signing that conflict with work zone signing (incidental to item 652.35).
 - In addition to the signs shown, contractor shall set up portable changeable message signs 7 days prior to the closure. Locations and messages to be determined by the contractor and approved by the resident.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		STP-2048(300)		BRIDGE PLANS	
WESTERN AVENUE BRIDGE		INTERSTATE 95		SIGNATURE		WIN	
FAIRFIELD		SOMERSET COUNTY		P.E. NUMBER		20483.00	
DETOUR SIGNING PLAN		DATE		BRIDGE NO. 5819			
SHEET NUMBER		15					
						OF 33	

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK- GROUND	LEGEND BORDER			
CS-1	24"	36"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			2	SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			6.00 (12.00)	
CS-2	24"	36"					2				6.00 (12.00)	
CS-3	36"	36"					2				9.00 (18.00)	
G20-2	48"	24"					2				8.00 (16.00)	
MI-1	24"	24"					6				4.00 (24.00)	
MI-5	24"	24"					20				4.00 (80.00)	
M3-1	24"	12"					3				2.00 (6.00)	
M3-2	24"	12"					11				2.00 (22.00)	
M3-3	24"	12"	 <div></div>				3				2.00 (6.00)	
M3-4	24"	12"	 <div></div>				9				2.00 (18.00)	
M4-8	24"	12"	 <div></div>				26				2.00 (52.00)	
M4-8a	24"	18"					4				3.00 (12.00)	
M5-IL	21"	15"					3				2.19 (6.56)	
M5-IR	21"	15"					4				2.19 (8.75)	
M6-IL	21"	15"					5				2.19 (10.94)	
M6-IR	21"	15"					8				2.19 (17.50)	
M6-2	21"	15"					2				2.19 (4.38)	
M6-3	21"	15"					4				2.19 (8.75)	
R10-6	24"	36"					4				6.00 (24.00)	
R11-2	48"	30"					2				10.00 (20.00)	

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK- GROUND	LEGEND BORDER			
R11-2	48"	30"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			2	SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			10.00 (20.00)	
R3-20R	24"	36"					2				6.00 (12.00)	
W19-1	144"	48"					2				48.00 (96.00)	
W19-5	90"	48"					2				30.00 (60.00)	
W20-1	48"	48"					4				16.00 (64.00)	
W20-2	48"	48"					2				16.00 (32.00)	
W20-4	48"	48"					2				16.00 (32.00)	
W3-3	48"	48"					2				16.00 (32.00)	
PLAQUE	48"	15"					1				5.00 (5.00)	
PLAQUE	48"	15"					1				5.00 (5.00)	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2048(300)

BRIDGE NO. 6819
WIN
20483.00
BRIDGE PLANS

WESTERN AVENUE BRIDGE
INTERSTATE 95
FAIRFIELD SOMERSET COUNTY

SIGN SUMMARY

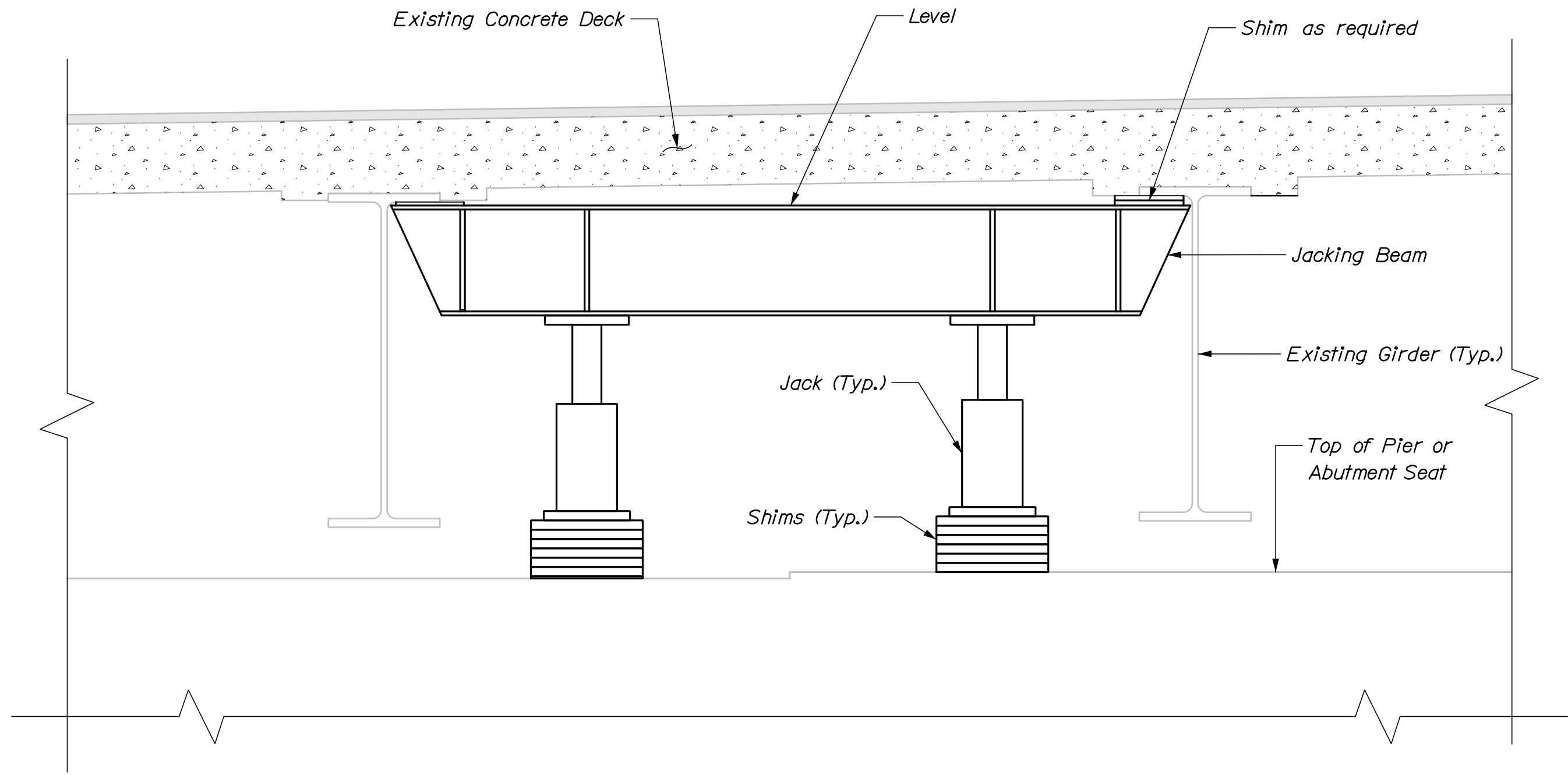
SHEET NUMBER
16
OF 33

Date:6/18/2015

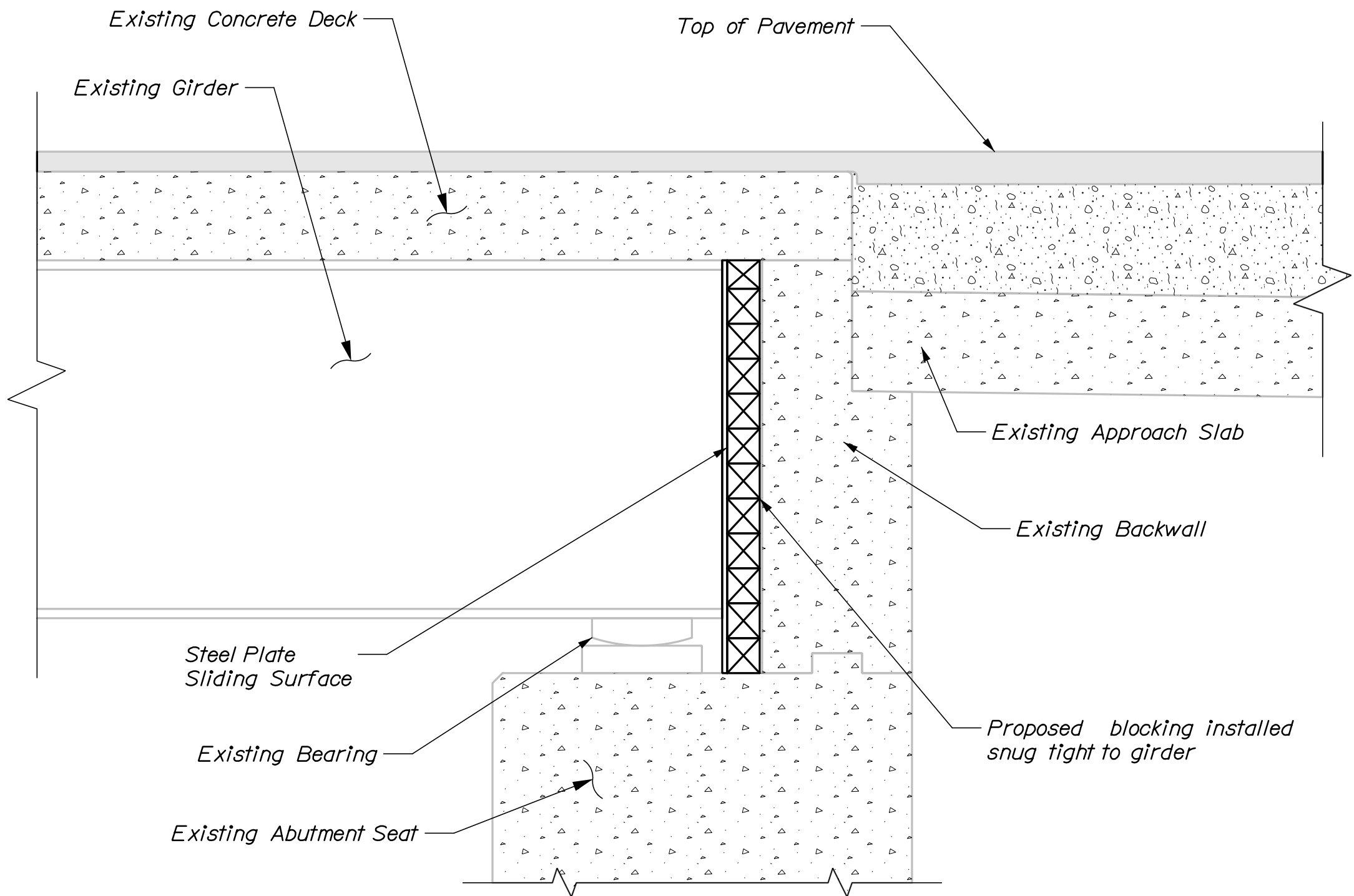
Username:

Division:

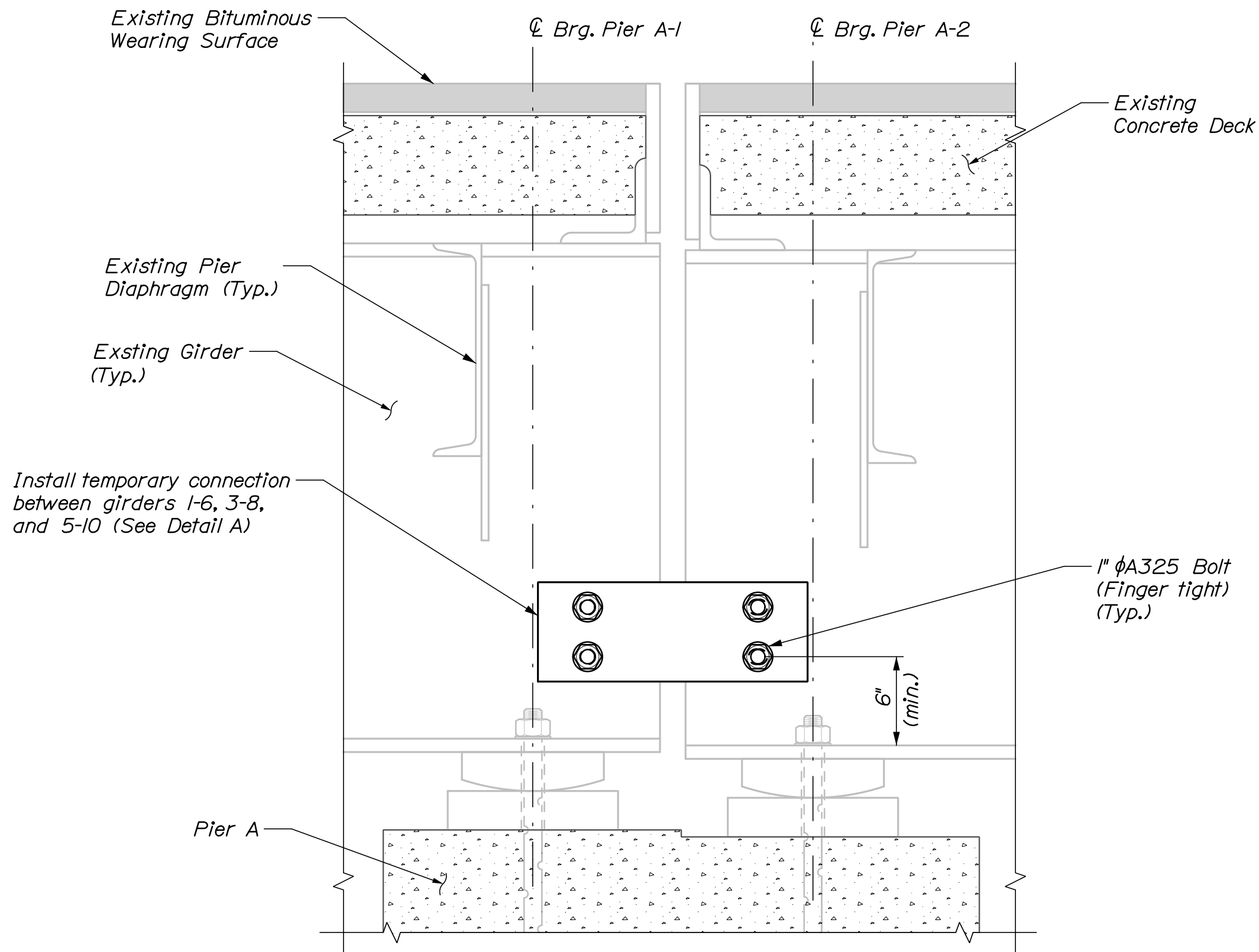
Filename: 017_Jacking_Dets.dgn



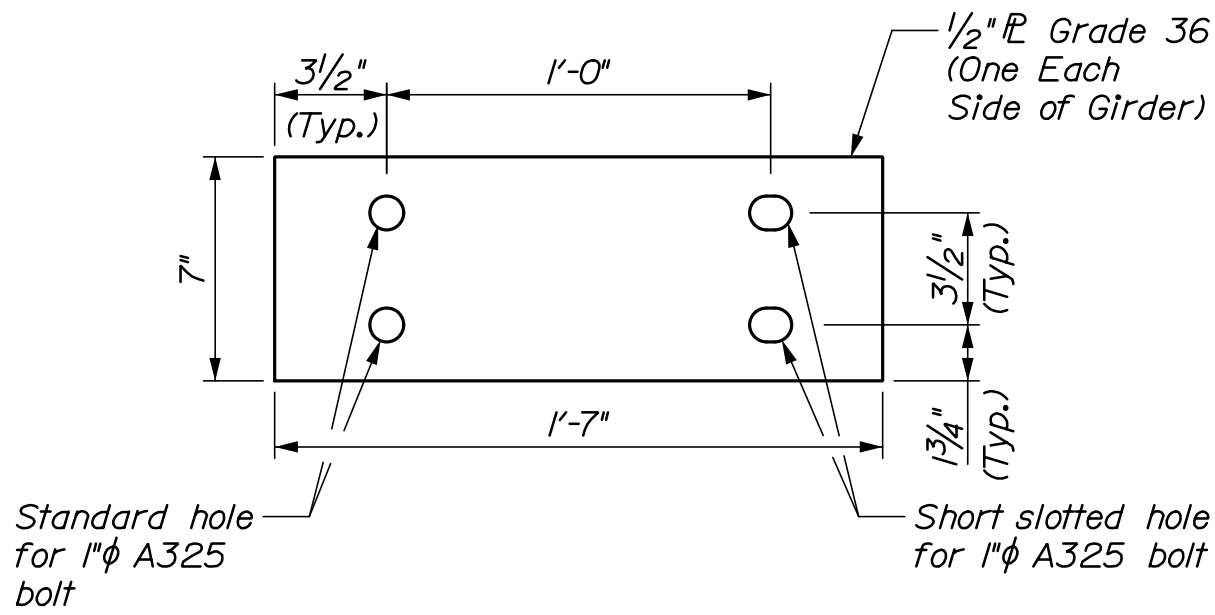
CONCEPTUAL JACKING DETAIL



CONCEPTUAL LONGITUDINAL RESTRAINT DETAIL



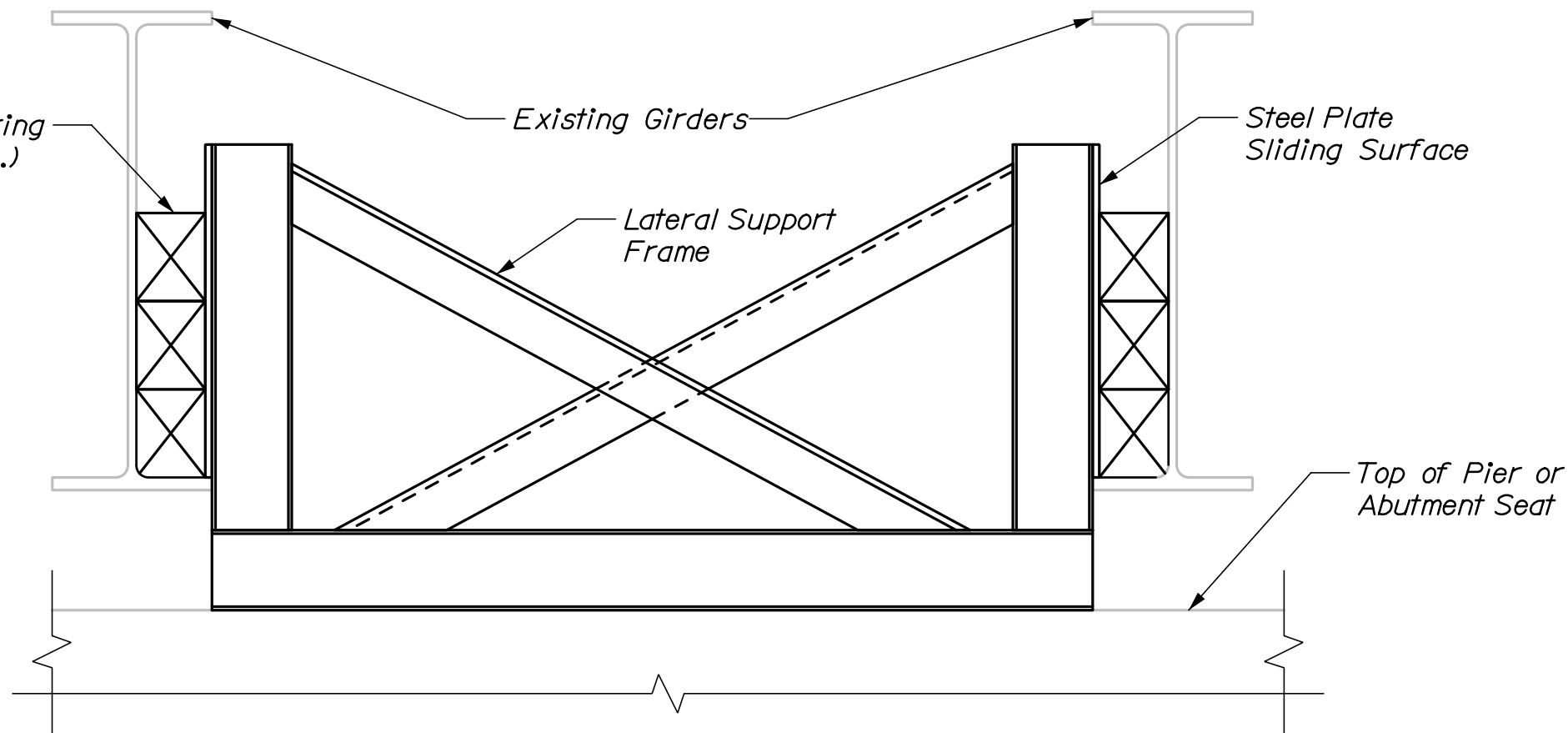
TEMPORARY GIRDER CONNECTION DETAIL
(Pier A shown)
(Piers B, C and D similar)



DETAIL A

UNFACTORED JACKING LOADS		
LOCATION	DEAD LOAD* (kips)	LIVE LOAD* (kips)
Abutment 1	34	74
Pier A-1	34	74
Pier A-2	39	77
Pier B-2	39	77
Pier B-3	39	77
Pier C-3	39	77
Pier C-4	39	77
Pier D-4	39	77
Pier D-5	29	70
Abutment 2	29	70

* All loads provided are per bearing



CONCEPTUAL LATERAL SUPPORT FRAME

Notes:

- The existing bridge shall be raised to accommodate the installation of new bearings and to increase bridge clearance over I-95. See sheet I8 for heights of new bearing assemblies.
- All girders at a support must be jacked and temporarily supported simultaneously.
- The Contractor shall make provisions to prevent longitudinal and transverse movement of the superstructure and twisting of the girders during jacking, and while the deck is temporarily supported.
- The existing superstructure shall be raised, per bearing line, by jacking at each pier and abutment. A minimum of four hydraulic jacks shall be used at each pier and abutment location. The jacking shall be synchronized so that all portions of the girders at a single substructure location are raised by approximately equal amounts simultaneously. A maximum of 1/8" differential movement between adjacent girders will be allowed during jacking. A maximum of 2" of differential movement will be permitted between adjacent substructure locations (e.g. between Pier A and Pier B) during jacking.
- The Contractor may support the jacking systems and temporary structural support systems off of the top of abutment seats, top of pier caps, substructure footings, or Contractor-furnished systems.
- All jacking details are conceptual and provided as reference. Contractor shall include all required details to restrain the girders during jacking operations as well as proposed jacking points in the jacking submittal.
- Field drill 1 5/16" φ hole in girder web for temporary girder connection.

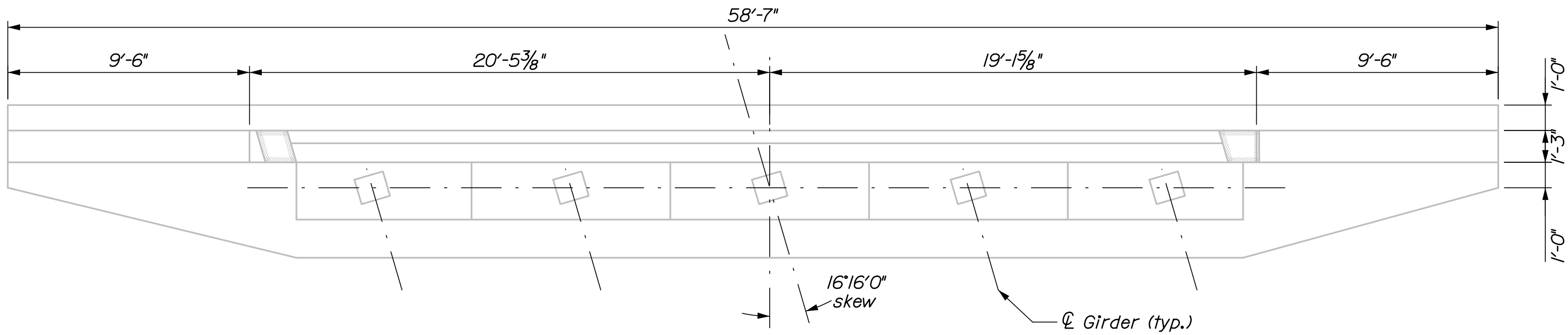
WESTERN AVENUE BRIDGE INTERSTATE 95 FAIRFIELD SOMERSET COUNTY				PROJ. MANAGER		M. Parfitt	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
JACKING DETAILS				DESIGN-DETAILED		JDW	PEB	05/15	SIGNATURE	
				CHECKED-REVIEWED		KEB	TRC	05/15		
				DESIGN2-DETAILED2		-	-	-		
				DESIGN3-DETAILED3		-	-	-		
				REVISIONS 1		-	-	-		
				REVISIONS 2		-	-	-	P.E. NUMBER	
				REVISIONS 3		-	-	-		
				REVISIONS 4		-	-	-		
				FIELD CHANGES		-	-	-		
								DATE	BRIDGE NO. 5819	
									WIN 20483.00	
									BRIDGE PLANS	

Date:6/19/2015

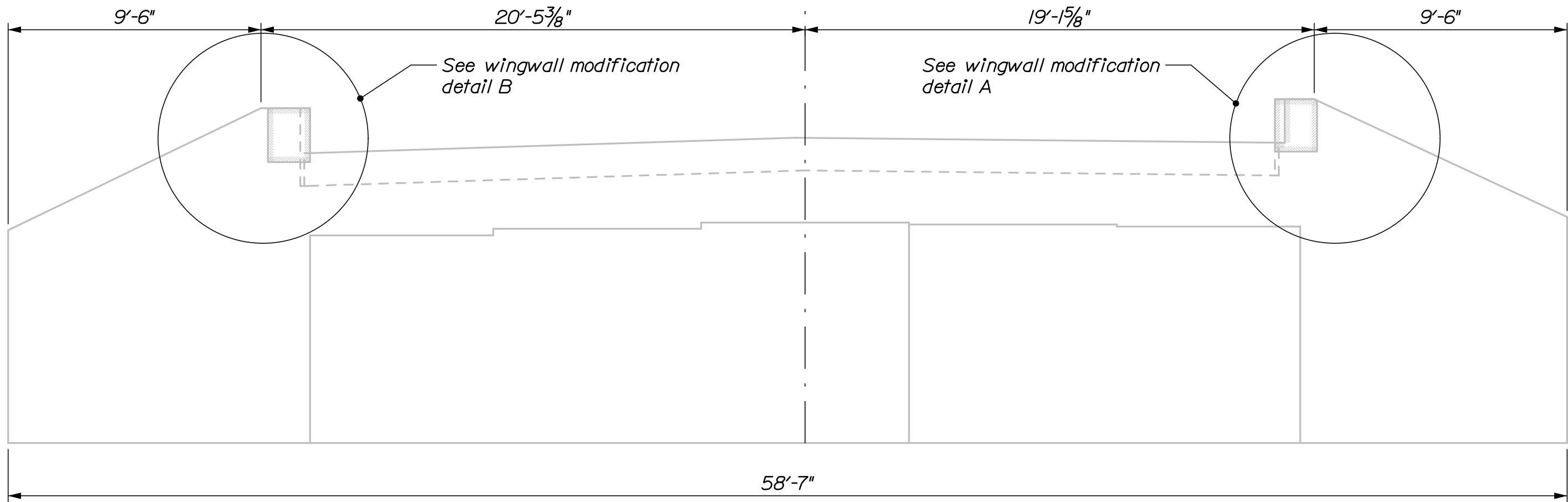
Username:

Division:

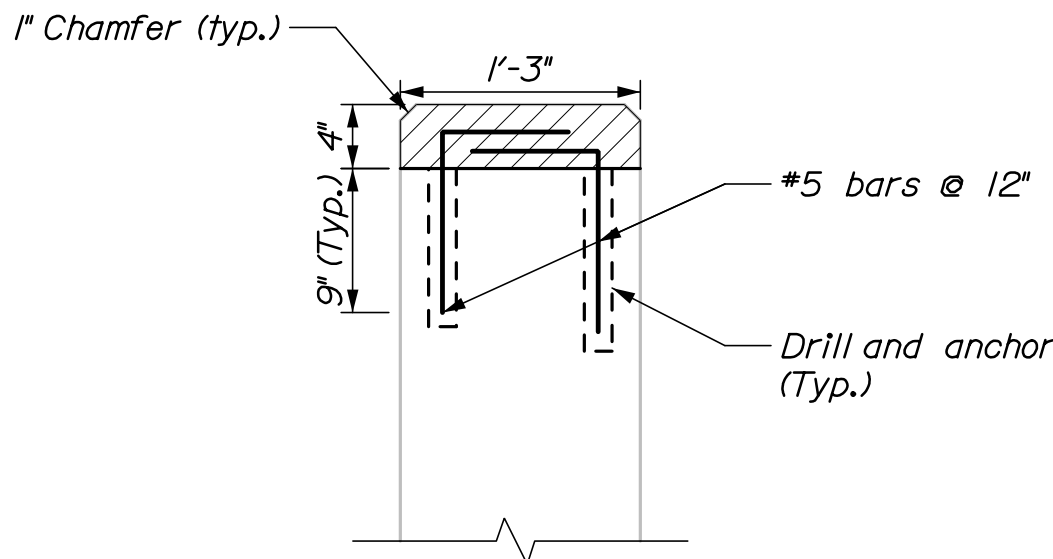
Filename: 018_Substructure.dgn



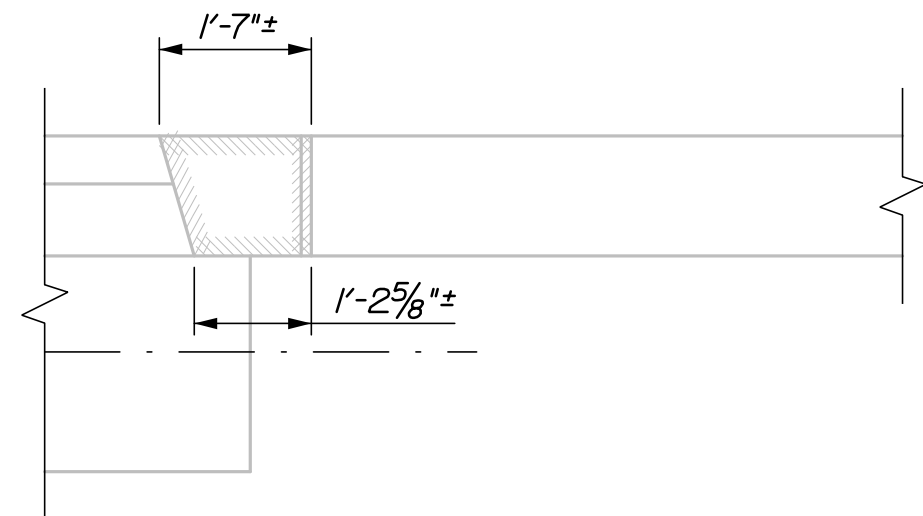
ABUTMENT NO. 1 PLAN
(Abutment No.2 similar)



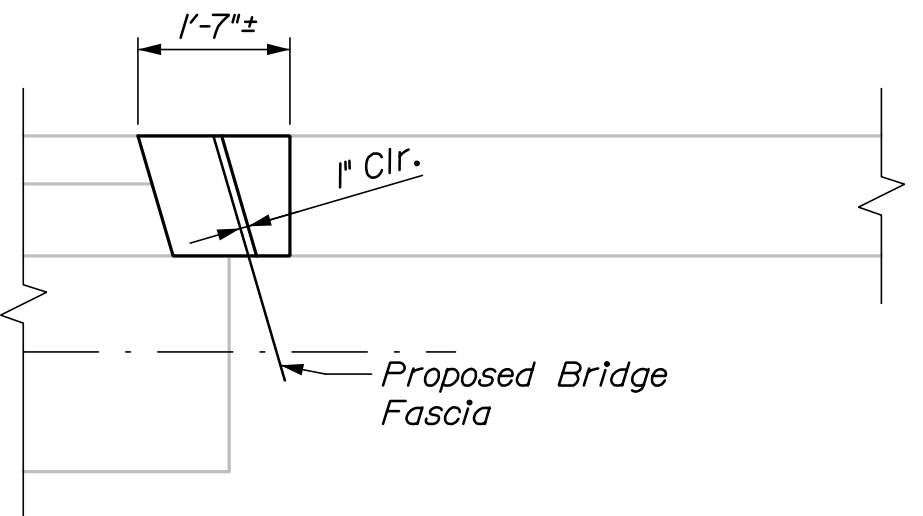
ABUTMENT NO. 1 ELEVATION
(Abutment No.2 similar)



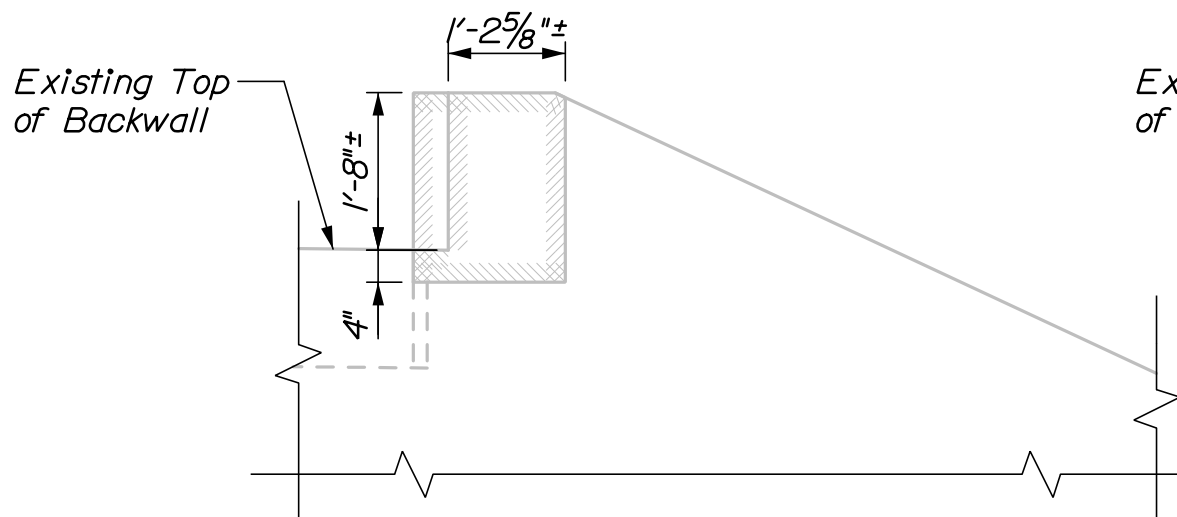
SECTION A-A



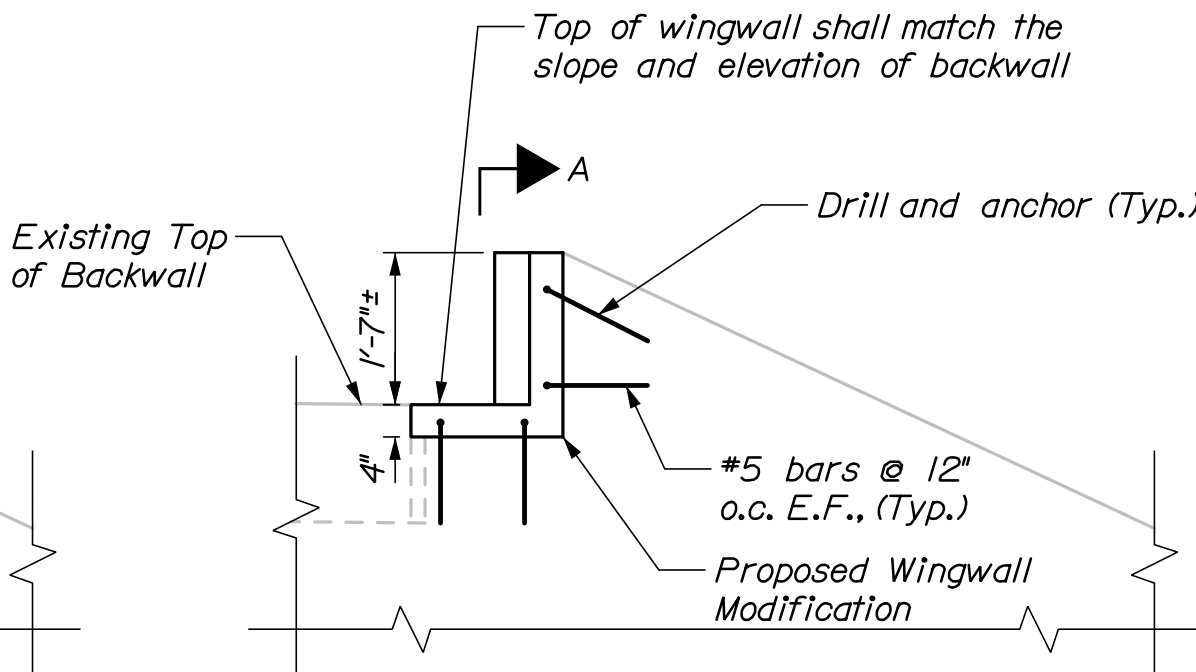
~ DEMOLITION PLAN ~



~ CONSTRUCTION PLAN ~

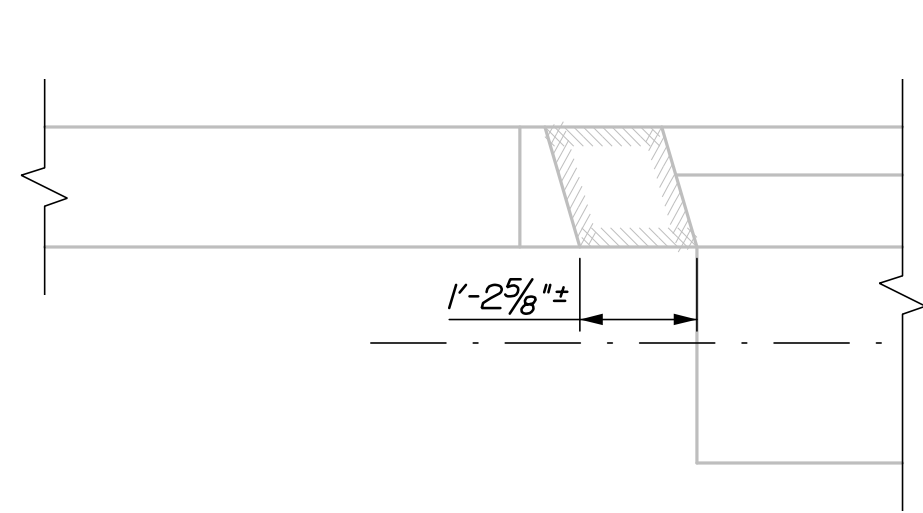


~ DEMOLITION ELEVATION ~

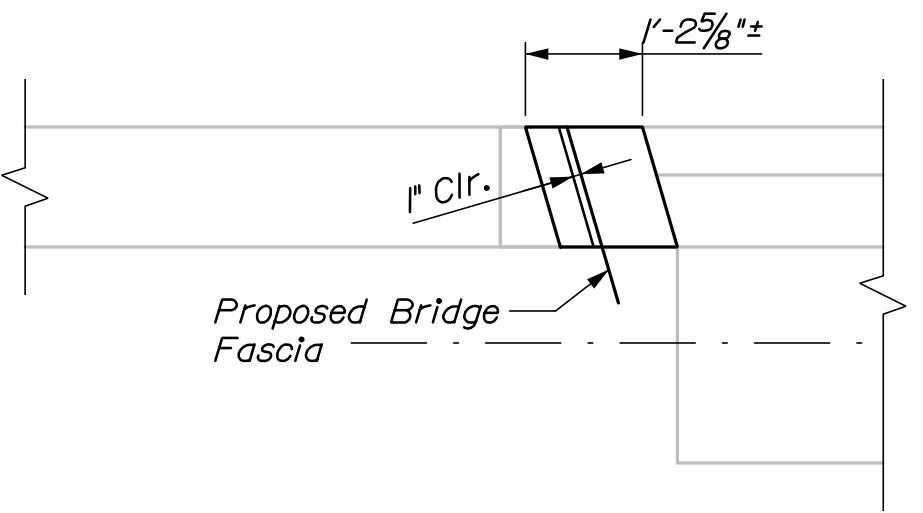


~ CONSTRUCTION ELEVATION ~

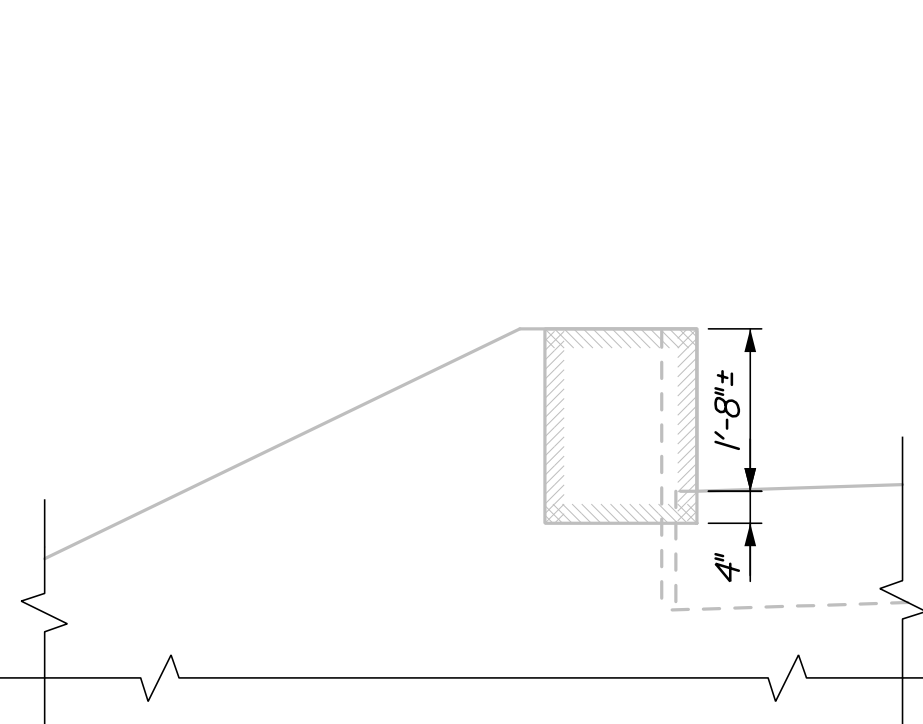
WINGWALL MODIFICATION DETAIL A



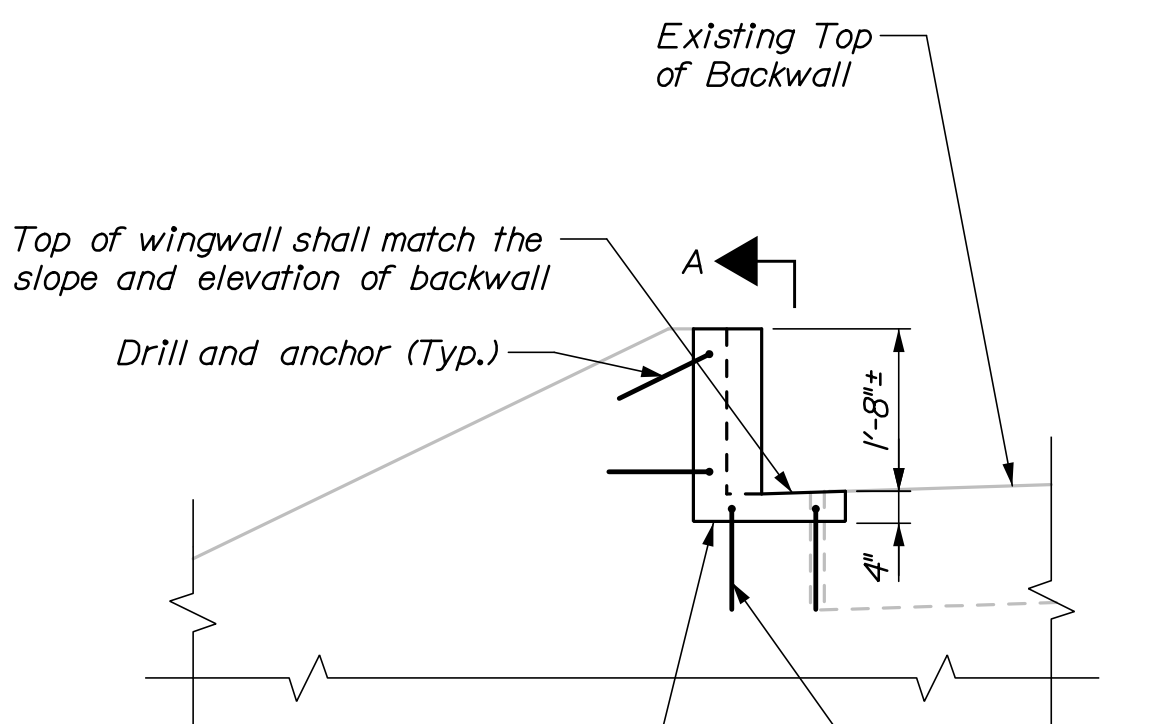
~ DEMOLITION PLAN ~



~ CONSTRUCTION PLAN ~



~ DEMOLITION ELEVATION ~



~ CONSTRUCTION ELEVATION ~

WINGWALL MODIFICATION DETAIL B

Notes:

1. Reinforcement for wingwall modifications shall be incidental to related concrete pay item.

STATE OF MAINE	STP-2048(300)	BRIDGE NO. 6819	WIN	20483.00	BRIDGE PLANS
DEPARTMENT OF TRANSPORTATION					

DESIGN-DETAILED	DATE	BY	DATE	SIGNATURE
CHECKED-REVIEWED	05/15	PEB	05/15	
DESIGN-DETAILED	05/15	TRC	05/15	
DESIGN-DETAILED	-	-	-	P.E. NUMBER
REVISIONS 1	-	-	-	DATE
REVISIONS 2	-	-	-	
REVISIONS 3	-	-	-	
REVISIONS 4	-	-	-	
FIELD CHANGES	-	-	-	

WESTERN AVENUE BRIDGE	SOMERSET COUNTY
INTERSTATE 95	
FAIRFIELD	
ABUTMENT/WINGWALL MODIFICATIONS	

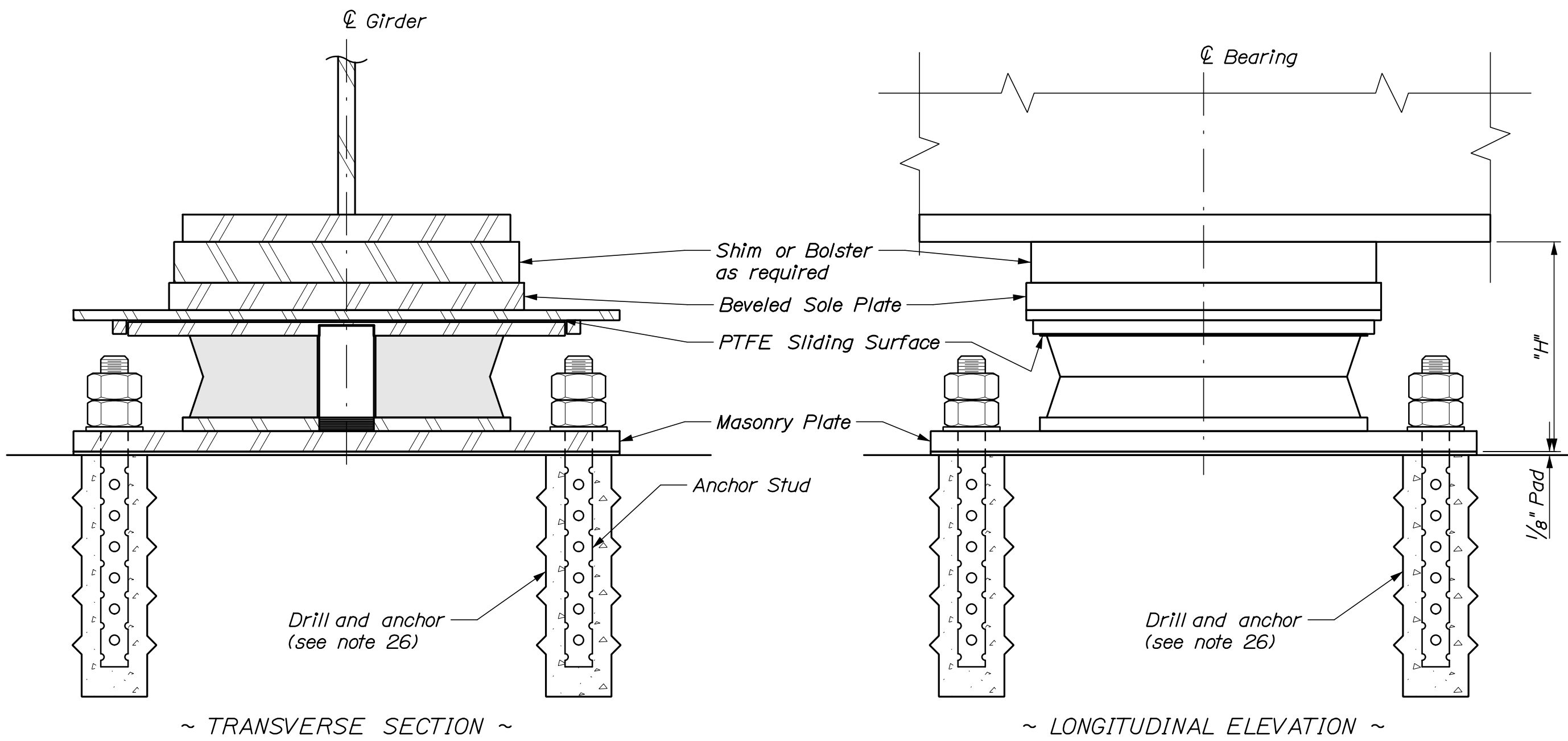
SHEET NUMBER
18
OF 33

Date:6/18/2015

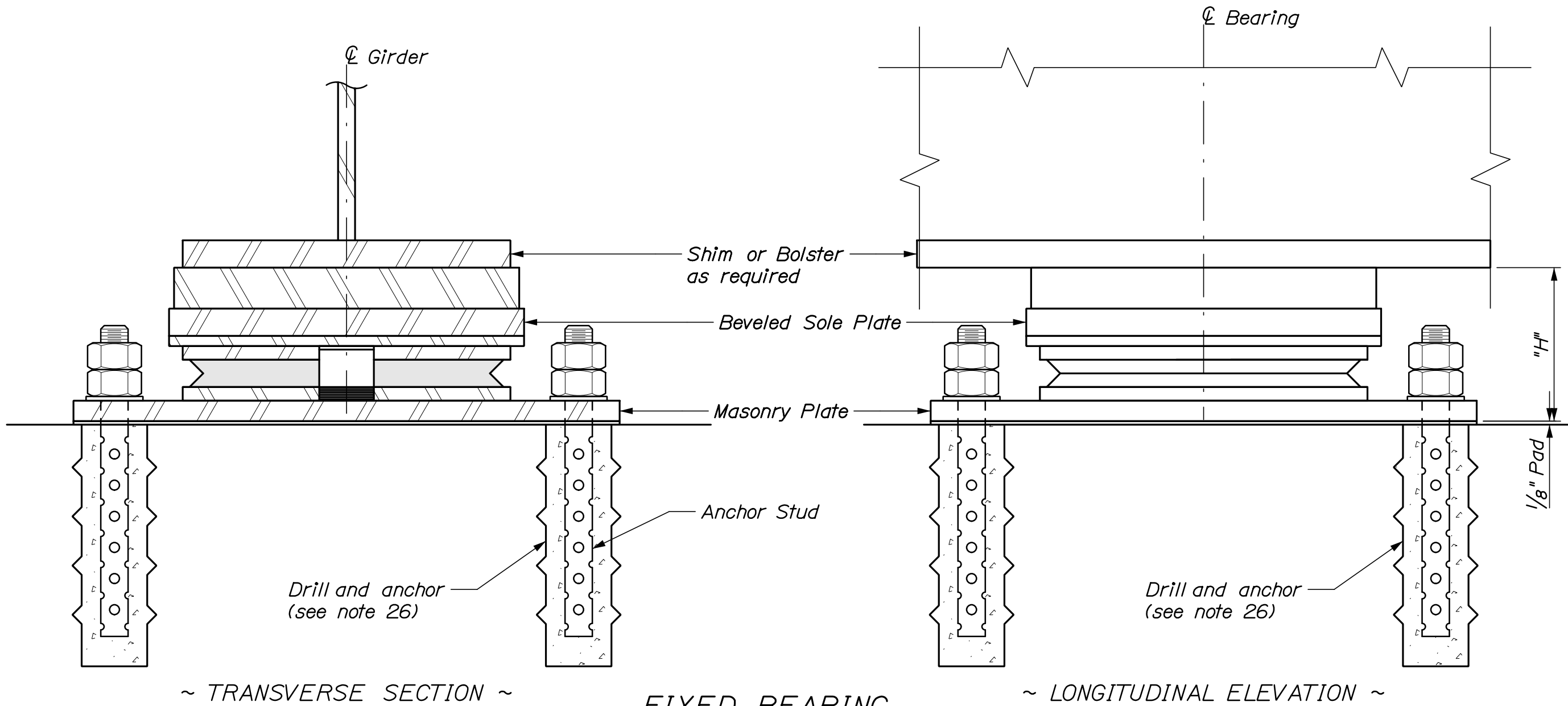
Username:

Division:

Filename: 019_Bearings.dgn



EXPANSION BEARING



FIXED BEARING

Notes:

1. The required bearing assembly height "H" is shown in the table. Dimensions and sizes of plates not shown are dependent on the design loads, capacity and the manufacturer of the bearings. The shop drawings, prepared by the manufacturer, shall provide all pertinent information. The manufacturer shall use a single shim plate or bolster to ensure the bearing assembly height matches the tabulated value. Shims or bolsters shall be installed between sole plate and girder. Manufacturer shall provide the following shims for field adjustment: 2 - 1" thick, 4 - 1/2" thick, 8 - 1/4" thick, and 8 - 1/8" thick.
2. Contractor shall field verify that proposed bearing assemblies shall fit with no more than two field installed shim plates.
3. Masonry plates shall be placed on 1/8" thick preformed pads in accordance with the specifications.
4. All steel, unless otherwise specified, shall meet the requirements of ASTM A709, Grade 50.
5. Bearing anchorage shall be an Anchor Stud with double nuts and washers.
6. Anchorage size and spacing shall be coordinated with the bearing manufacturer.
7. Anchor bolts shall meet the requirements of ASTM A325, Type I.
8. Anchor rods shall meet the requirements of ASTM F1554, Grade 105 and shall be swaged on the embedded portion of the rod.
9. Heavy hex nuts shall meet the requirements of ASTM A563, Grade D or DH.
10. Anchor bolts, rods, washers and nuts shall be galvanized to ASTM A153 or ASTM B695, Class 50, Type I. Payment for galvanizing will be considered incidental to the disc bearing pay items. Contractor shall make appropriate provisions to allow welding girder to bearing assembly without removing galvanizing.
11. For all bearings, all steel shall be coated in accordance with Standard Specifications Section 506, Shop Applied Protective Coating - Steel (Hot Dip Galvanizing). Payment for Coatings for Disc Bearings will be considered incidental to Item No. 523.5552, Pot or Disc Bearings, Expansion or Item No. 523.5551 Pot or Disc Bearings, Fixed.
12. The abbreviation "PTFE" indicates polytetrafluoroethylene.
13. All PTFE, including guide and restraint surfaces, shall be unfilled.
14. PTFE minimum bearing pressure shall be 1 ksi under total service loading.
15. Average compressive stresses on the disc shall be computed using the minimum plan area of the unstressed disc, excluding the area of any holes.
16. The design temperature range shall be 125°F (-20°F to 105°F).
17. Design of the sole plates, masonry plates, and shims or bolsters is the responsibility of the Bearing Manufacturer. Payment shall be included under Item No. 523.5551, Pot or Disc Bearings, Fixed or Item No. 523.5552, Pot or Disc Bearings, Expansion as appropriate.
18. Sole plate shall be beveled according to the grade defined at each substructure location in the Disc Bearing Design Table.
19. Strength Limit State rotations shown in the Disc Bearing Design Table do not include an allowance for uncertainties of 0.005 radians, as defined in AASHTO LRFD Bridge Design Specifications, 7th Edition 2014.
20. Bearings shall be designed with a thermal load factor of 1.0.
21. Longitudinal horizontal forces do not include friction forces at expansion bearings.
22. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge, and a direction arrow that points upstation. All marks shall be permanent and shall be visible after the bearing is installed.
23. Bearing installation shall be in strict conformance with the Standard Specifications and the manufacturer's recommendations.
24. In the Disc Bearing Setting Corrections Table, a negative dimension indicates a direction towards Pier B. A positive dimension indicates a direction away from Pier B.
25. Temperatures shown in the Disc Bearing Setting Corrections Table are those of the steel girders and not necessarily the ambient air temperature.
26. Drill and anchor bearings into existing abutment seat or pier cap as required. Proposed anchorage shall not conflict with existing anchorage or reinforcement. Drilling and anchoring shall be incidental to Pay Item 523.52 Bearing Installation
27. Fixed bearings shall be detailed to allow 1/8" longitudinal translation to accommodate link slab operation.

DISC BEARING DESIGN TABLE																			
Location	Bearing Type	Existing Bearing Height (inches)	Required Bearing Assembly Height "H" (inches)	Design Loads Per Bearing (kips)										Design Rotation (Note No. 19)				Total Long. Movement (in.)	Sole Plate Bevel (%) (See Note 18)
				Vertical				Horizontal											
				Strength	Extreme Event	Service		Strength		Extreme Event		Service							
				Total Load	Total Load	Dead Load	Total Load	Longitudinal (Note No. 20)	Transverse	Longitudinal (Note No. 20)	Transverse	Longitudinal (Note No. 20)	Transverse	Rotation (radians)	Coincidental Total Load (kips)	Rotation (radians)	Coincidental Total Load (kips)		
Abut. No. 1	Uni-directional	5.5	8	177	38	38	110	0	5	0	10	0	1	0.0066	121	0.0047	78	1 1/4	-1.14
Pier A-1 Ext.	Uni-directional	5.5	8	177	38	38	110	0	5	0	10	0	1	0.0066	121	0.0047	78	9/16	-1.13
Pier A-1 Int.	Uni-directional	5.5	5.5	177	38	38	110	0	5	0	10	0	1	0.0066	121	0.0047	78	9/16	-1.13
Pier A-2	Uni-directional	5.5	7.5	190	44	44	119	0	6	0	11	0	1	0.0079	128	0.0057	84	9/16	-1.13
Pier B-2	Fixed	5.5	10.75	190	44	44	119	21	11	50	11	12	4	0.0079	128	0.0057	84	0	-1.49
Pier B-3	Fixed	5.5	10.75	190	44	44	119	21	11	50	11	12	4	0.0079	128	0.0057	84	0	-1.53
Pier C-3	Uni-directional	5.5	12.75	190	44	44	119	0	6	0	11	0	1	0.0079	128	0.0057	84	9/16	-2.64
Pier C-4	Uni-directional	5.5	12.75	190	44	44	119	0	6	0	11	0	1	0.0079	128	0.0057	84	9/16	-2.67
Pier D-4	Uni-directional	5.5	10.75	190	44	44	119	0	6	0	11	0	1	0.0079	128	0.0057	84	1 3/16	-3.79
Pier D-5	Uni-directional	3	8.5	163	32	32	101	0	4	0	8	0	1	0.0042	111	0.0030	72	1 3/16	-3.82
Abut. No. 2	Uni-directional	3	4	163	32	32	101	0	4	0	8	0	1	0.0042	111	0.0030	72	1 5/8	-4.65

Disc Bearing Setting Corrections Table							
	Dimension "X" (inches)						
	15 °F	30 °F	45°F	60 °F	75 °F	90 °F	
Abut. No. 1	-1/4	-1/8	0	1/8	1/4	3/8	
Pier A-1	-1/8	-1/16	0	1/16	1/8	3/16	
Pier A-2	-1/8	-1/16	0	1/16	1/8	3/16	
Pier B-2	0	0	0	0	0	0	
Pier B-3	0	0	0	0	0	0	
Pier C-3	-1/8	-1/16	0	1/16	1/8	3/16	
Pier C-4	-1/8	-1/16	0	1/16	1/8	3/16	
Pier D-4	-1/4	-1/8	0	1/8	1/4	7/16	
Pier D-5	-1/4	-1/8	0	1/8	1/4	7/16	
Abut. No. 2	-3/8	-3/16	0	3/16	3/8	9/16	

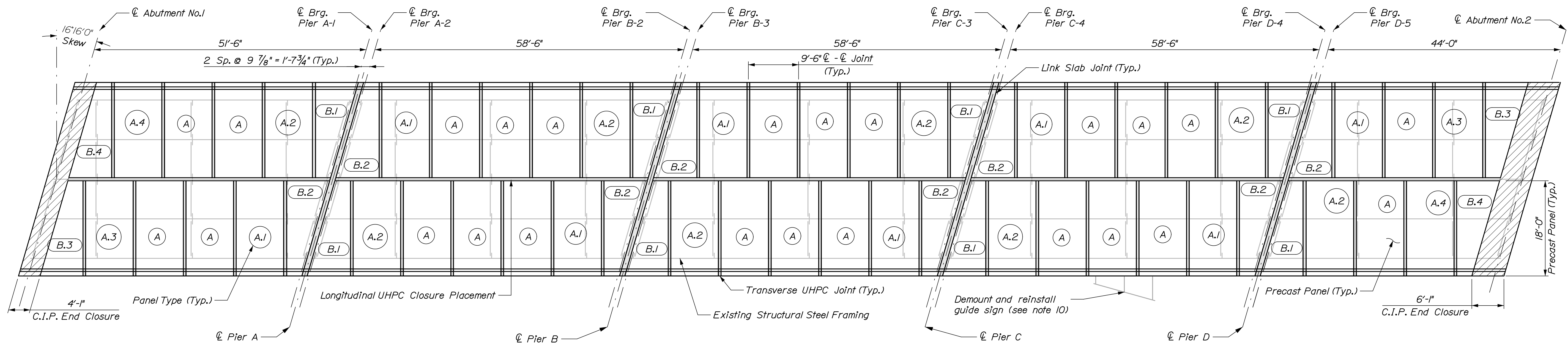
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP-2048(300)

BRIDGE NO. 6819
WIN
20483.00
BRIDGE PLANS

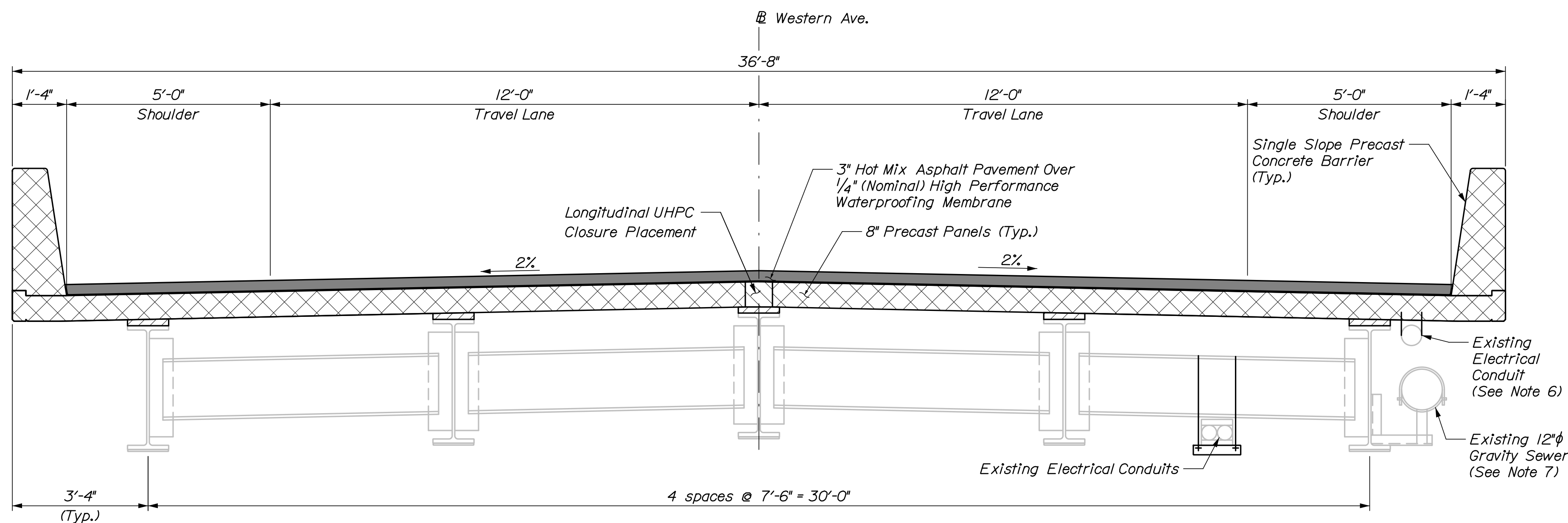
WESTERN AVENUE BRIDGE
INTERSTATE 95
FAIRFIELD
SOMERSET COUNTY

BEARING DETAILS

SHEET NUMBER
19
OF 33



SUPERSTRUCTURE PLAN



TYPICAL SECTION

Notes:

1. Contractor shall field verify all dimensions and horizontal locations prior to ordering materials to verify fit-up of new precast panels.
2. The panel layout and dimensions provided are suggested and may be modified with the Engineer's approval. Final panel layout and dimensions shall be shown on precast panel shop drawings.
3. All dimensions provided are plan dimensions. The fabrication dimensions accounting for the profile and slope of the proposed deck shall be shown in the precast panel shop drawings.
4. Adjust precast panels to grade by using vertical adjustment assemblies. Torque on leveling screws shall provide equal load distribution to all girders in accordance with approved torque schedule. Torque on leveling screws shall be within 15% of value shown in torque schedule.
5. UHPC shall reach a minimum compressive strength of 14.5 ksi prior to applying the wearing surface.
6. Conduits shall be supported using embedded anchors in precast panels. Contractor shall coordinate with utility owner and precaster to determine size and spacing of anchors. Anchors shall be shown in shop drawings and shall be incidental to related contract items.
7. Gravity sewer line supports shall be modified to accommodate superstructure elevation change. See utility specification for more information.
8. Form a V-groove on the fascias at the horizontal joint between the barrier and slab.
9. The theoretical blocking used for design of the structure is 1/2" at the centerline bearings of the abutments and piers. Refer to Standard Detail 502 (02) for blocking details.
10. Existing guide sign shall be demounted from bridge and reinstalled at location shown on sheet 4 prior to starting phase 2 demolition.

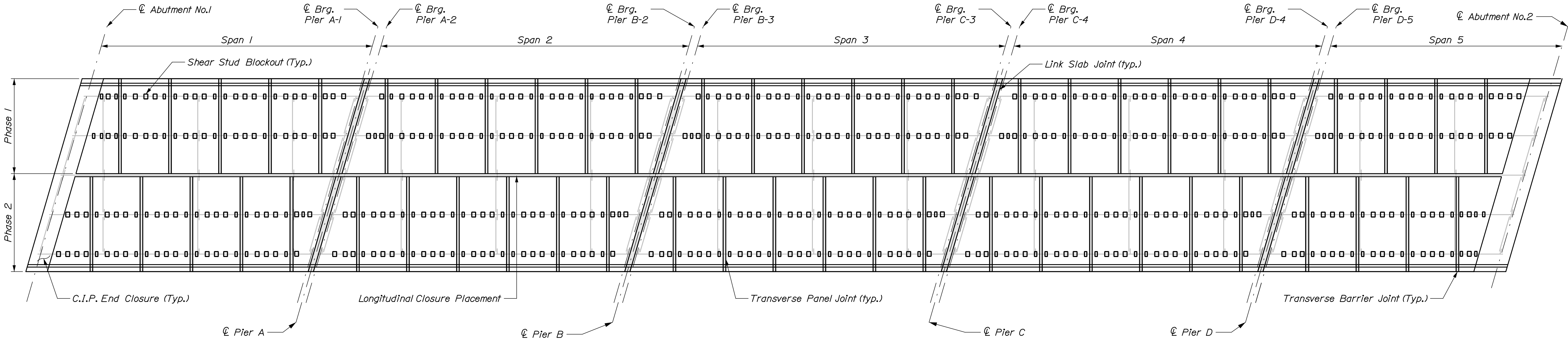
Grider No.	TOP of SLAB ELEVATIONS										
	☐ Brg.	0.1 L	0.2 L	0.3 L	0.4 L	0.5 L	0.6 L	0.7L	0.8 L	0.9 L	☐ Brg.
1	194.11	194.05	193.99	193.93	193.87	193.82	193.76	193.70	193.64	193.58	193.51
2	194.29	194.22	194.16	194.11	194.05	193.99	193.93	193.87	193.81	193.75	193.69
3	194.47	194.40	194.34	194.28	194.22	194.17	194.11	194.05	193.99	193.92	193.86
4	194.35	194.28	194.22	194.16	194.10	194.04	193.98	193.92	193.86	193.80	193.74
5	194.23	194.16	194.10	194.03	193.97	193.91	193.86	193.80	193.74	193.67	193.61
6	193.50	193.43	193.37	193.31	193.25	193.18	193.11	193.04	192.96	192.88	192.78
7	193.67	193.61	193.55	193.48	193.42	193.35	193.29	193.22	193.14	193.06	192.97
8	193.85	193.78	193.72	193.66	193.59	193.53	193.46	193.39	193.32	193.24	193.15
9	193.72	193.66	193.60	193.53	193.47	193.40	193.34	193.27	193.20	193.12	193.03
10	193.59	193.53	193.47	193.41	193.34	193.28	193.21	193.14	193.07	193.00	192.91
11	192.76	192.66	192.56	192.46	192.34	192.22	192.09	191.95	191.80	191.65	191.49
12	192.94	192.85	192.75	192.65	192.54	192.41	192.29	192.15	192.01	191.86	191.70
13	193.12	193.04	192.94	192.84	192.73	192.61	192.49	192.35	192.21	192.06	191.91
14	193.01	193.92	192.83	192.73	192.62	192.51	192.38	192.25	192.11	191.97	191.81
15	192.89	192.81	192.72	192.62	192.51	192.40	192.28	192.15	192.01	191.87	191.72
16	191.44	191.28	191.12	190.94	190.76	190.57	190.37	190.17	189.95	189.73	189.51
17	191.65	191.50	191.33	191.16	190.98	190.79	190.60	190.39	190.18	189.89	189.74
18	191.86	191.71	191.55	191.38	191.20	191.01	190.82	190.62	190.41	190.20	189.97
19	191.77	191.62	191.46	191.29	191.12	190.93	190.74	190.55	190.34	190.13	189.91
20	191.68	191.53	191.37	191.21	191.03	190.85	190.67	190.47	190.27	190.05	189.84
21	189.44	189.27	189.09	188.91	188.73	188.54	188.35	188.15	187.95	187.75	187.54
22	189.68	189.51	189.33	189.15	188.97	188.79	188.60	188.40	188.20	188.00	187.79
23	189.91	189.74	189.57	189.39	189.22	189.03	188.84	188.65	188.45	188.25	188.05
24	189.84	189.68	189.51	189.33	189.16	189.97	188.79	188.59	188.40	188.20	188.00
25	189.78	189.61	189.44	189.27	189.10	188.91	188.73	188.54	188.35	188.15	187.95

Date:6/18/2015

Username:

Division:

Filename: 022_SuperstructureSequence.dgn



SUPERSTRUCTURE ERECTION & PLACEMENT SEQUENCE

Panel Erection Notes:

1. Panel erection shall proceed from the center of each span and progress towards centerlines of bearing.
2. Contractor shall exercise care to ensure panels are located within $\pm 1/4$ " transverse & $\pm 1/2$ " longitudinal of the required panel position.
3. Panels shall be secured to prevent moving or shifting prior to curing of UHPC in shear stud blockouts.
4. Preset vertical adjustment assembly to anticipated height prior to placing panels on girders.
5. Top of panel elevations shall not be finalized until all panels for a span to be placed in a phase have been set into position.
6. Continuous hardwood blocking shall be placed under all phase I panels along the center girder. All blocking shall be tight fit.
7. Panels shall be aligned such that the back face of each barrier form a straight line from end to end of the bridge.
8. Panels shall be erected such that the back face of each barrier is vertical once leveling screws have been properly torqued.

UHPC Placement Sequence

First, beam haunches and shear stud blockouts shall be placed proceeding from low end of span.

Next, transverse panel joints shall be placed starting at the fascia and proceeding towards the bridge centerline.

Next, link slab joint placements shall be placed following transverse panel joints.

Next, after UHPC in transverse joints has achieved 6 ksi, transverse barrier joints may be placed.

Finally, after phase 2 link slab joints have been placed, longitudinal closure placement starting at Abutment No. 2 proceeding towards Abutment No. 1 may occur.

UHPC QUANTITIES (CY)		
Haunches and Trans. Joints		
Span	Phase I	Phase II
Span 1	3.5	3.5
Span 2	4.5	4.5
Span 3	4.5	4.5
Span 4	4.5	4.5
Span 5	3.0	3.0
Long. Closure Placement		5.5

Notes:

1. UHPC for beam haunches shear stud blockouts, and transverse panel joints shall be JS1000. UHPC for longitudinal closure placement shall be JS1212. Both UHPC mixes are manufactured by Lafarge.
2. Cast-in-place end closure placements at abutments may be cast at anytime once the precast panels in the adjacent span have been placed.
3. UHPC shall be placed as recommended by the manufacturer to prevent cold joints except along longitudinal closure placement and at bottom of transverse barrier joint.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-2048(300)

BRIDGE NO. 6819
WIN
20483.00

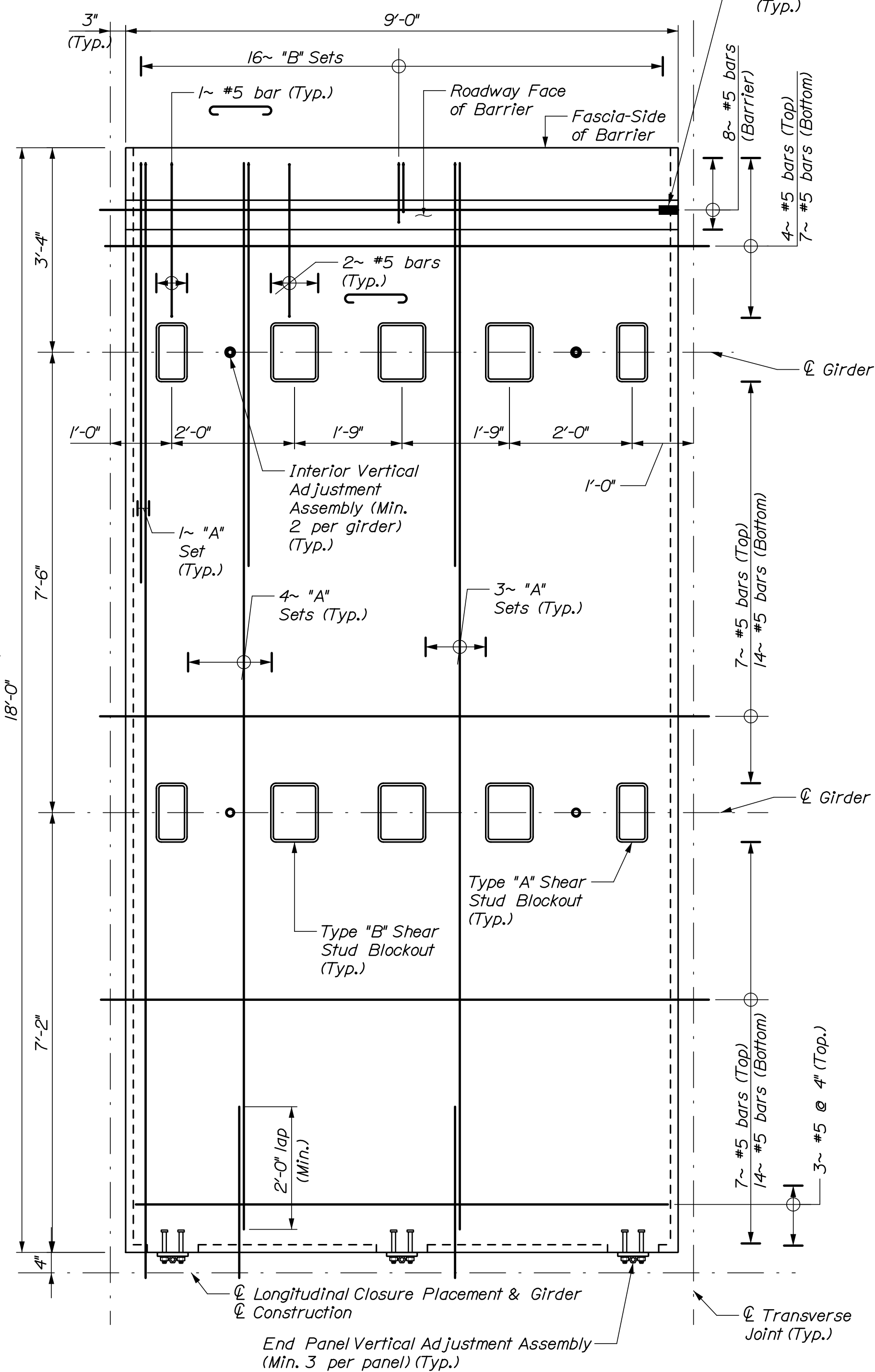
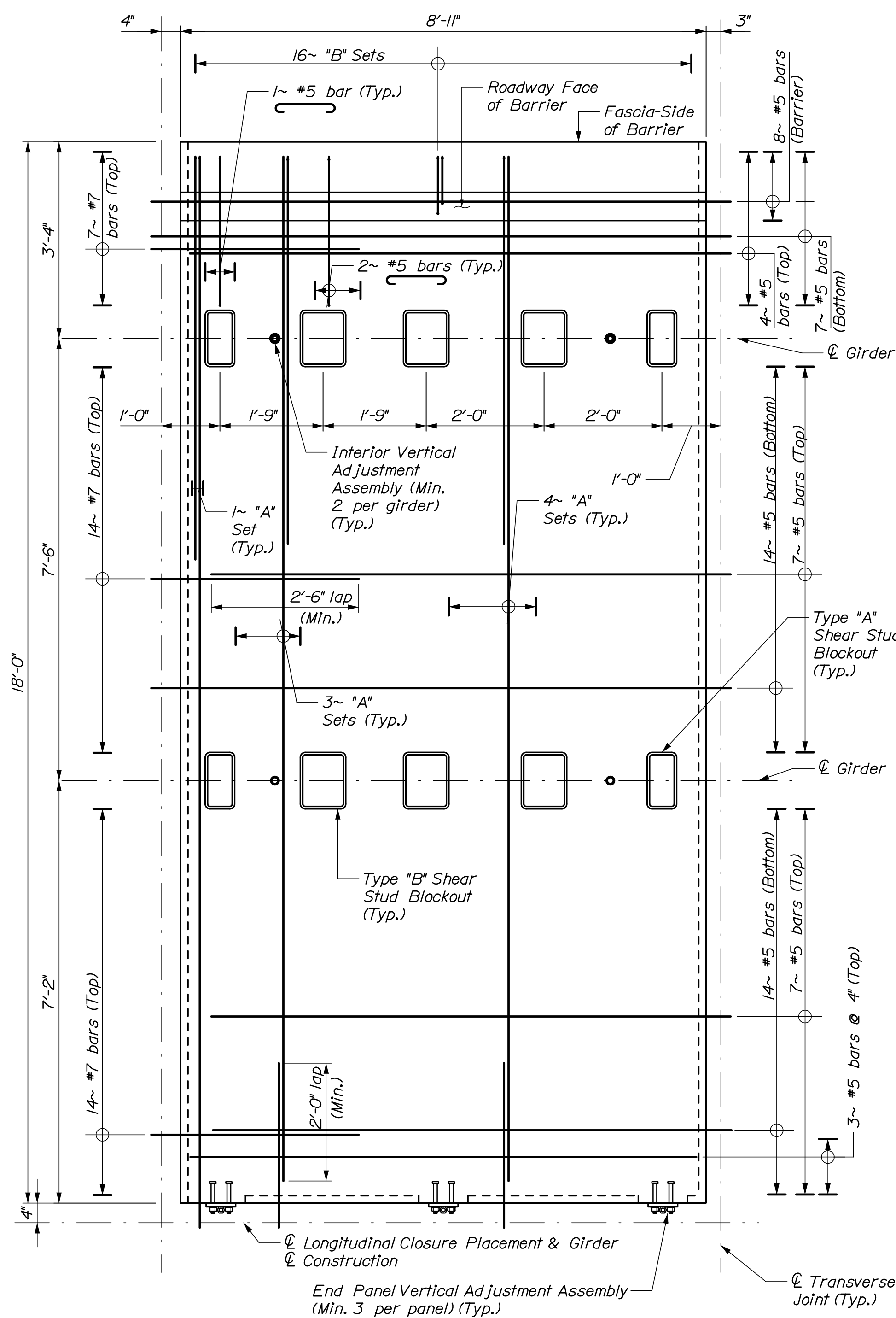
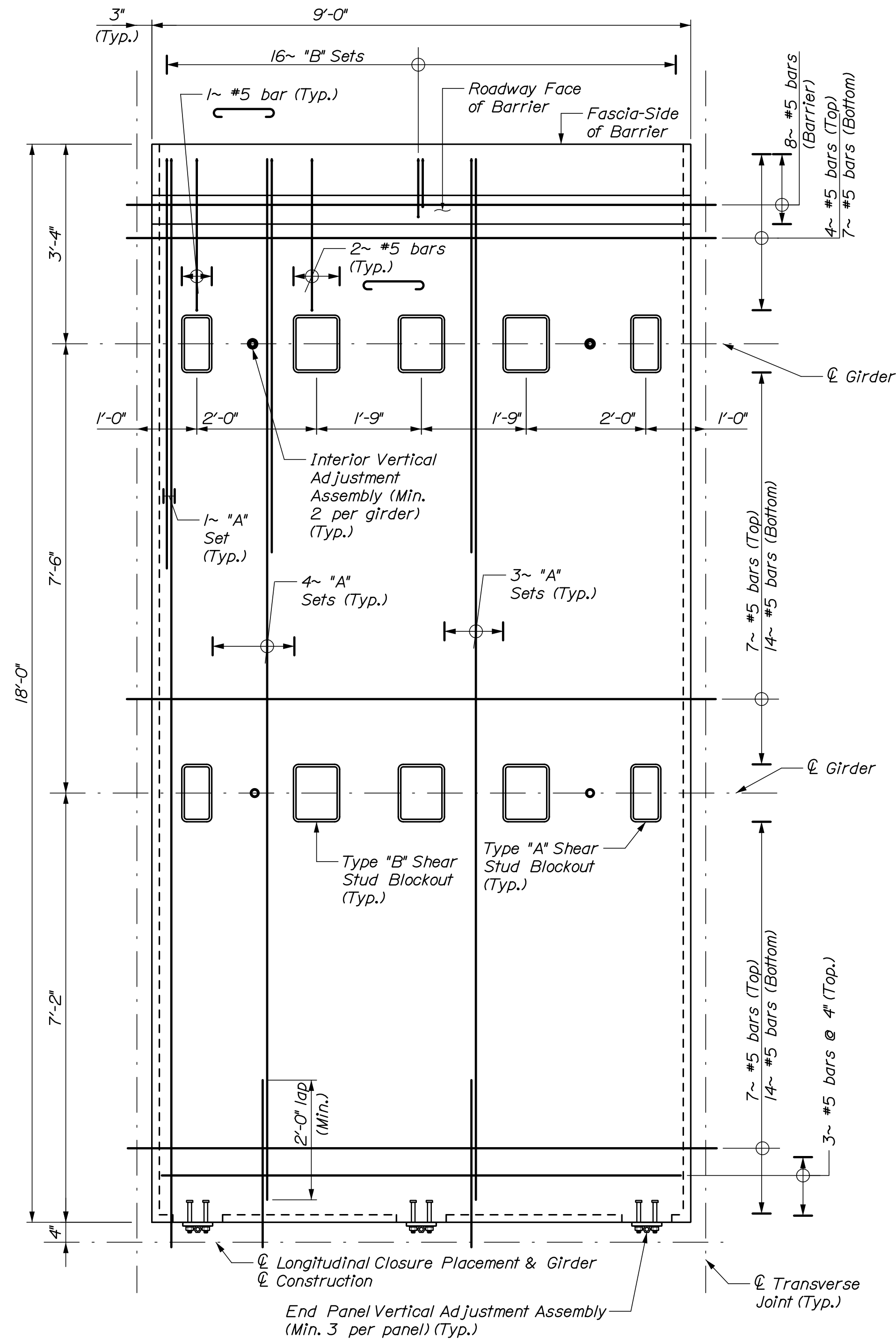
BRIDGE PLANS

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	JOW	PEB	05/15
CHECKED-REVIEWED	KEB	TRC	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

WESTERN AVENUE BRIDGE
INTERSTATE 95
FAIRFIELD SOMERSET COUNTY

SUPERSTRUCTURE
PLACEMENT SEQUENCE








SHEET NUMBER
22
OF 33

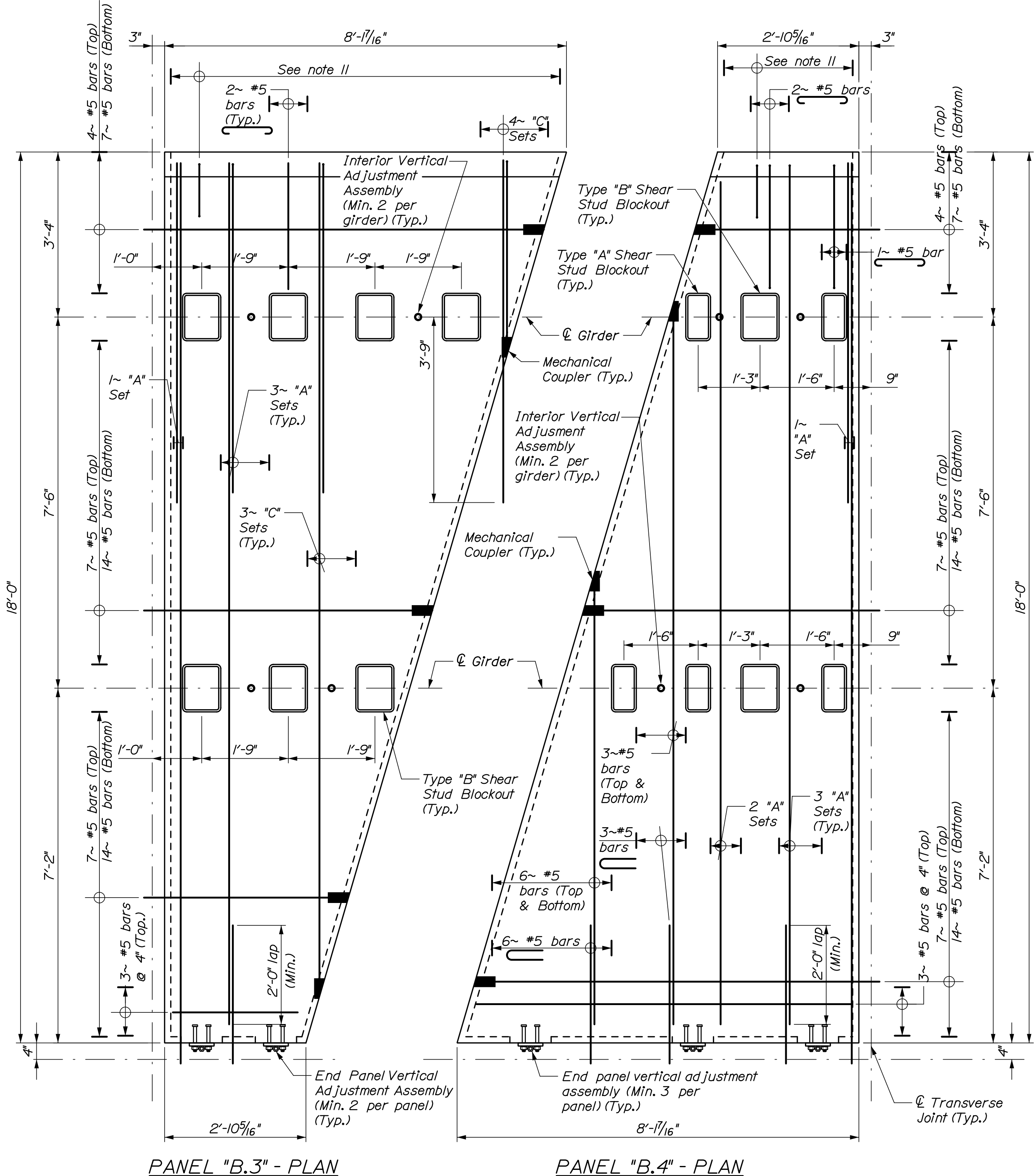
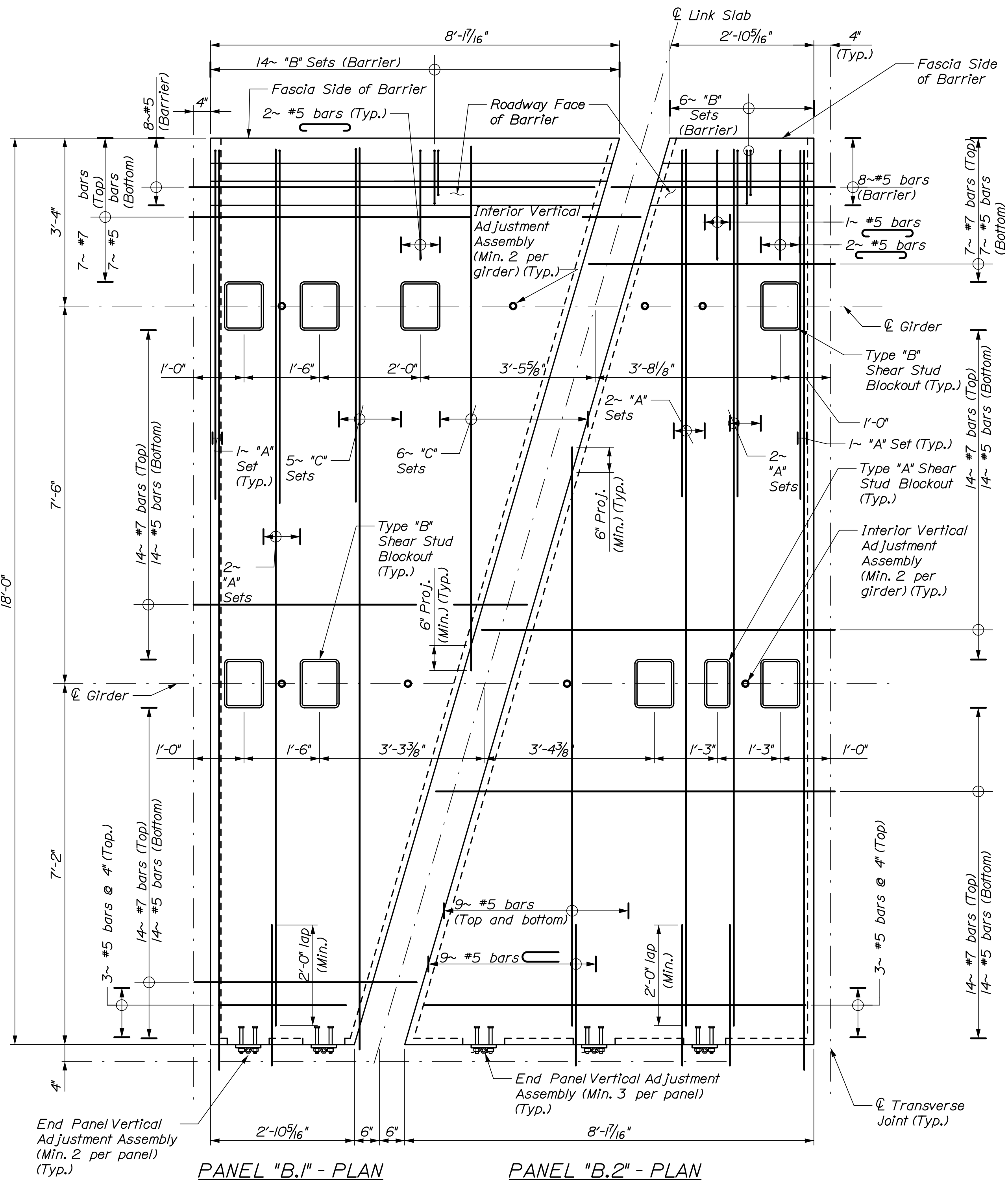


1. All transverse bars distributed between shear stud blockouts and panel ends.
2. Bar reinforcing protruding from sides of panels shall be laterally offset from reinforcing in adjacent panels to allow lap splicing without field bending; bars may be offset up to one-half bar spacing.
3. A machine or similar bolt shall provide smooth and detailed vertical adjustment to the panel after placement of the girders.
4. The location, spacing, and final details of the vertical adjustment devices shall be designed for at least 50% more than the load of the precast panel, barrier, construction, and traffic loading as determined by the Contractor.
5. The bolts for the vertical adjustment devices shall be completely removed. The voids shall be filled with an approved grout after the girder haunch has been placed and cured.

6. The details shown are suggested. Alternative details may be submitted for approval. Details and layout of vertical adjustment devices shall be signed and sealed by a Maine licensed Professional Engineer and submitted as part of the precast panel shop drawings.
7. The cost of vertical adjustment devices, including furnishing, installing, removing, and all work required grouting voids shall be incidental to Pay Item 535.02 Full Depth Concrete Deck Panels.
8. Contractor shall coordinate with precaster to place sleeves or inserts for temporary bolt down barrier. Size and spacing of sleeves and inserts shall be determined by a licensed Professional Engineer and shown on the shop drawings.
9. Contractor shall exercise care in lifting, handling, storing and transporting the precast deck panels to prevent cracking or damage. Panels shall have lifting devices as designed by a licensed Professional Engineer and approved by the Resident.

10. All keyways shall have an exposed aggregate finish.
11. Barrier reinforcement in deck panels shall be as required for modified transition barrier shown on sheet 31.
12. Panel surface shall be given a smooth bull float or wood float finish.
13. Mechanical couplers shall be provided on straight bars in "C" sets for panels B.3 and B.4.
14. Barrier shall be formed such that the back face is vertical once the panels are erected with the specified cross slope.

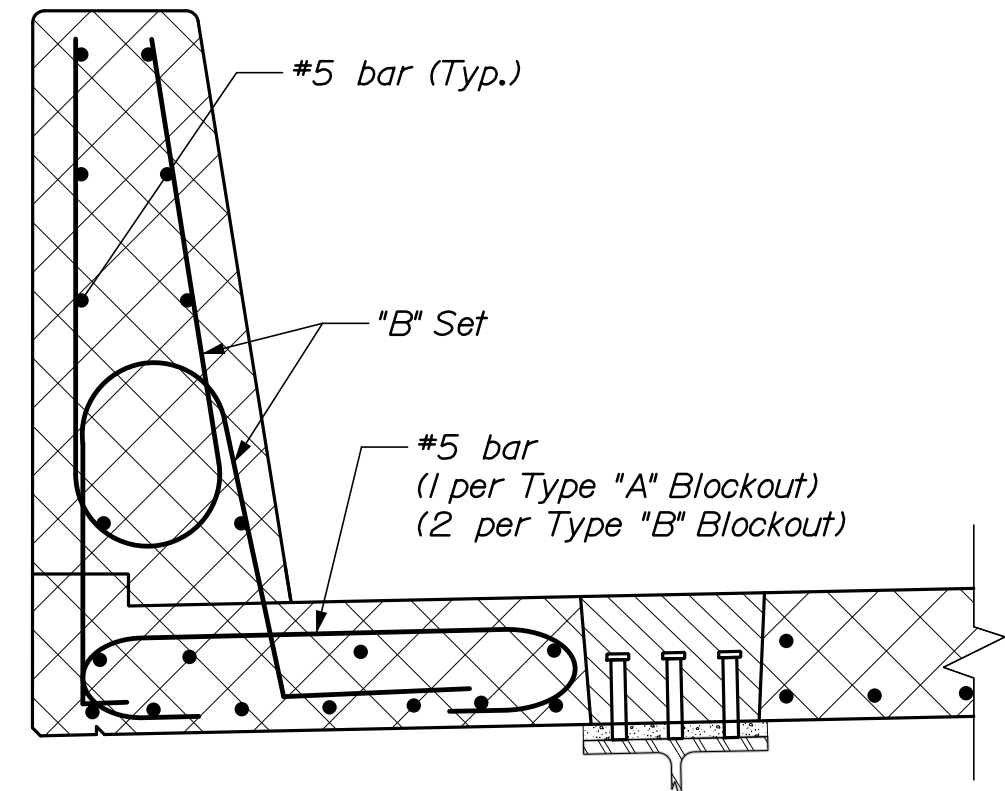
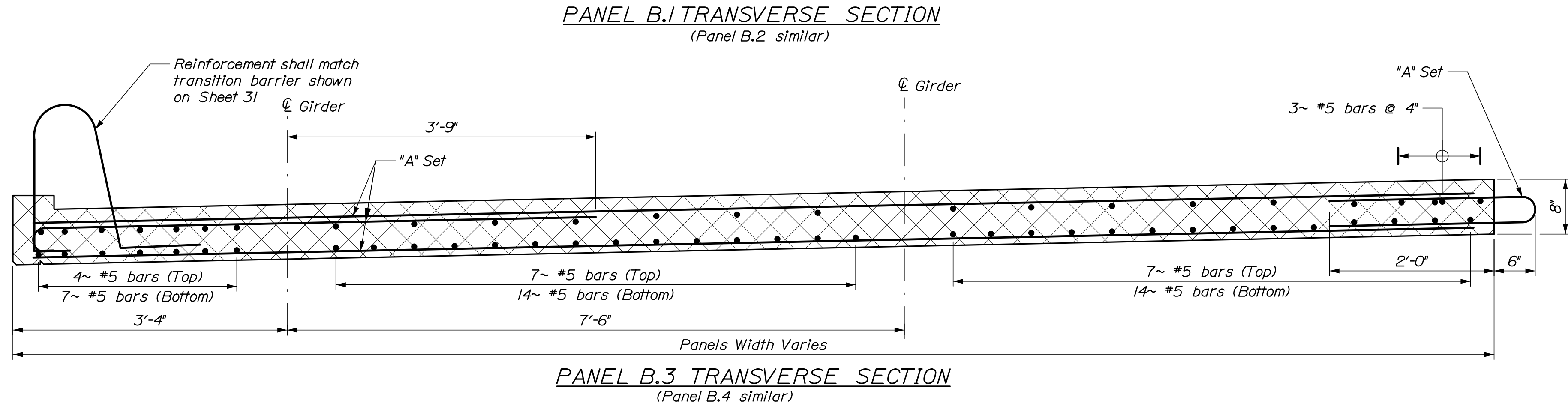
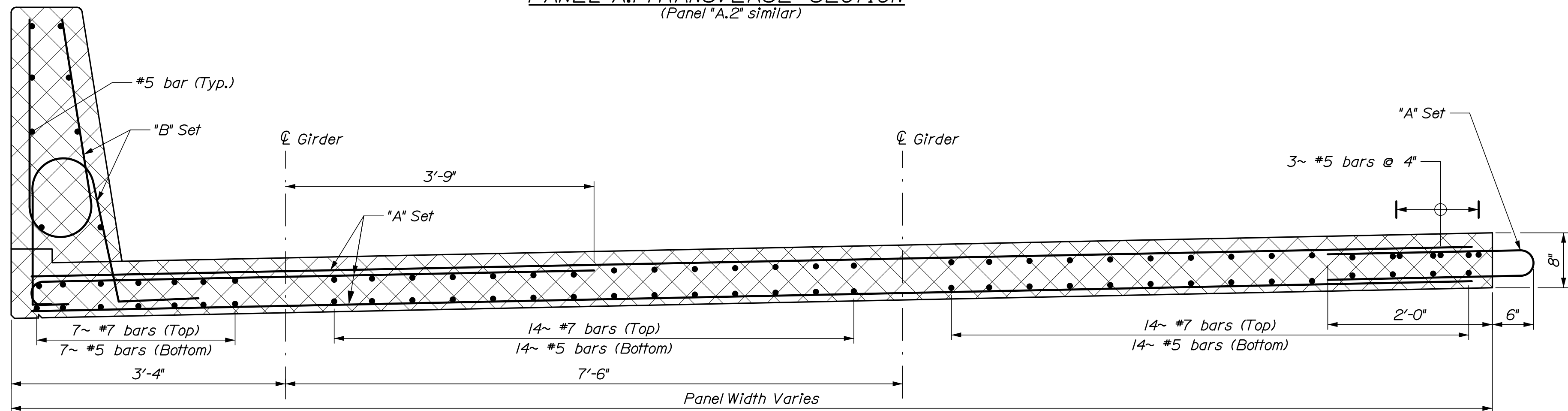
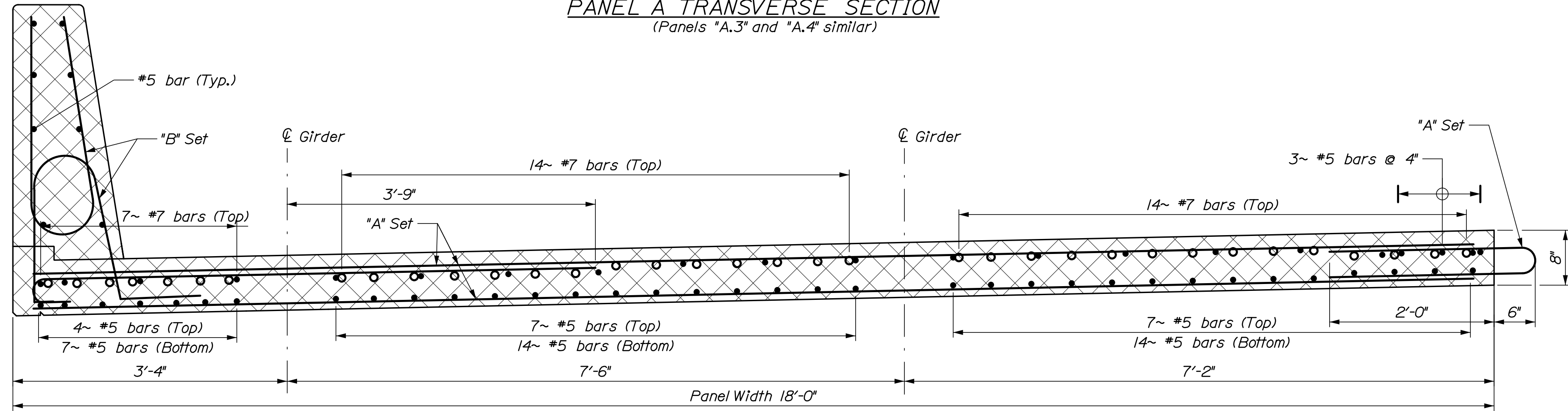
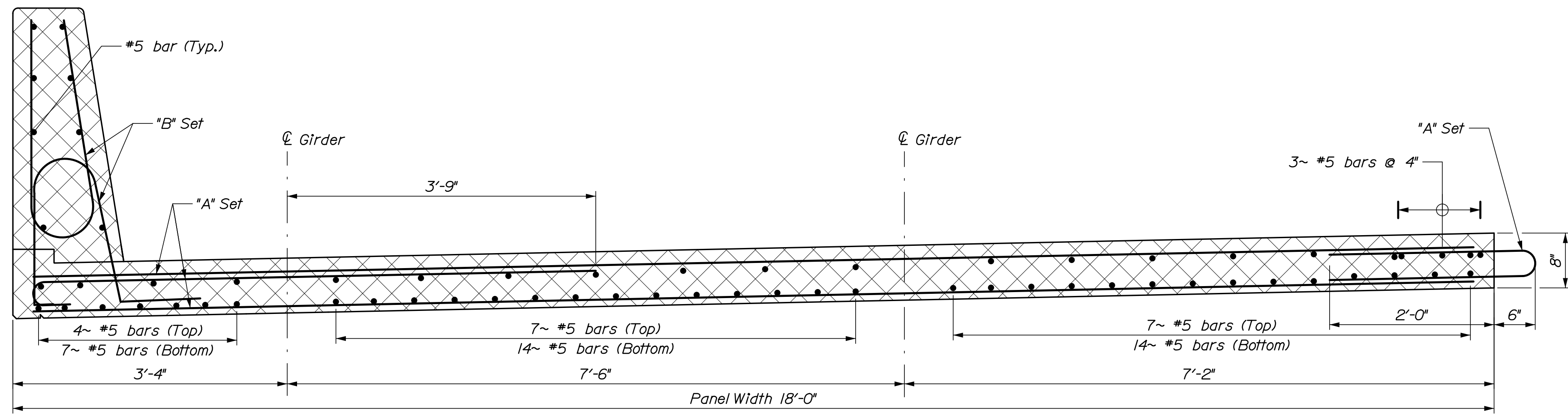
REINFORCING BAR SETS		
Set	Number of bars in set	Bars
A	2	#5 
	1	#6 
	1	#5 
B	1	#5 
	1	#5 
C	2	#5 
	1	#6 










Notes:
1. For precast panel notes see sheet 22.

REINFORCING BAR SETS		
Set	Number of bars in set	Bars
A	2	#5
	1	#6
	1	#5
B	1	#5
	1	#5
	2	#5
C	2	#5
	1	#6

Filename: 025_Superstructures_Dets_PanelSections.Dwg

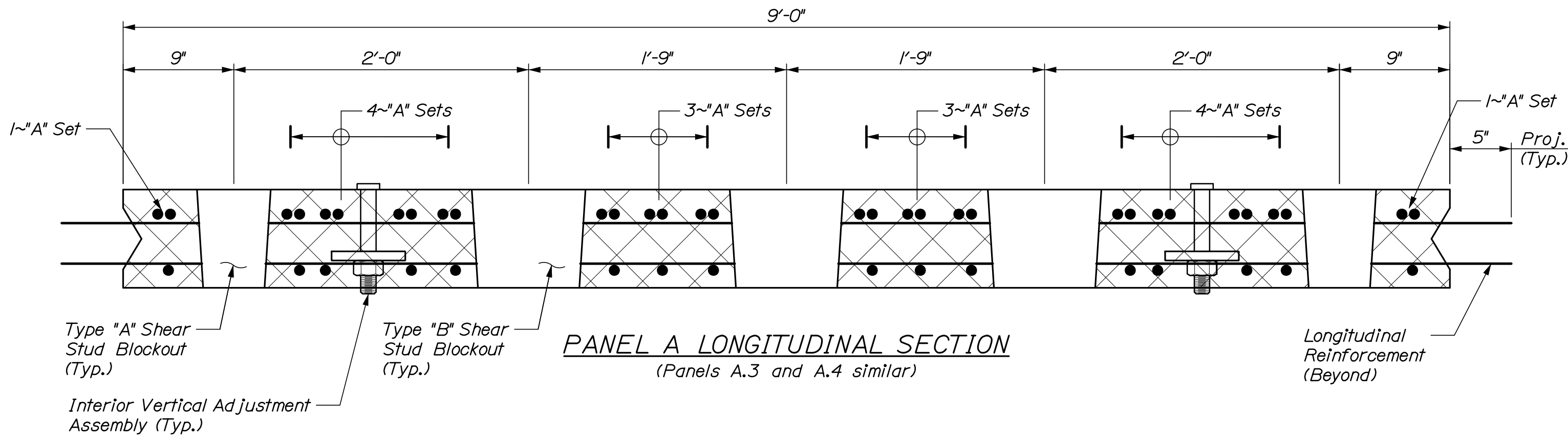


REINFORCING BAR SETS		
Set	Number of bars in set	Bars
A	2	#5 
	1	#6 
	1	#5 
B	1	#5 
	1	#5 
C	2	#5 
	1	#6 

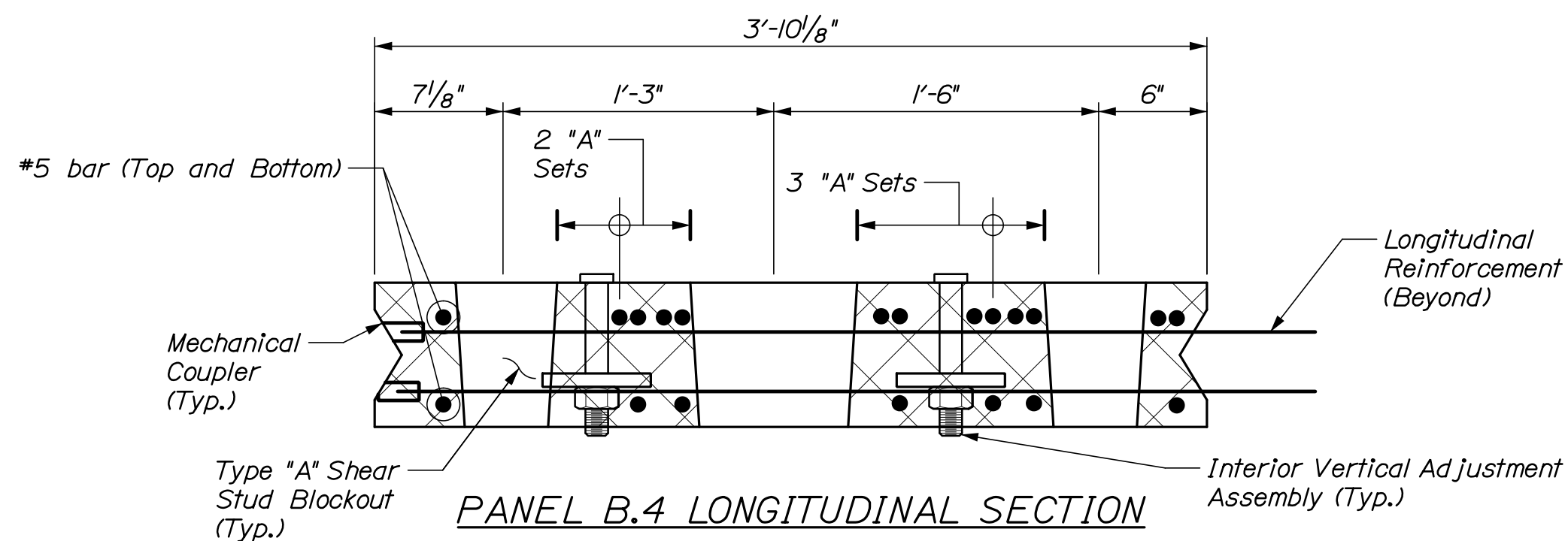
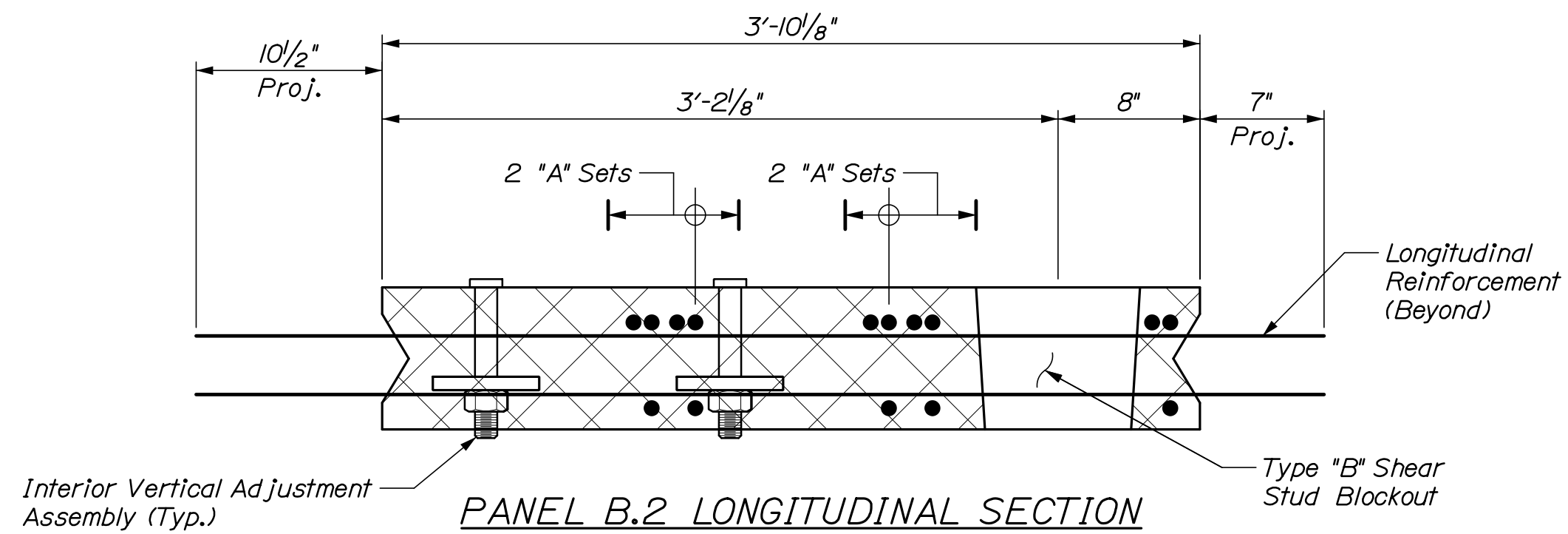
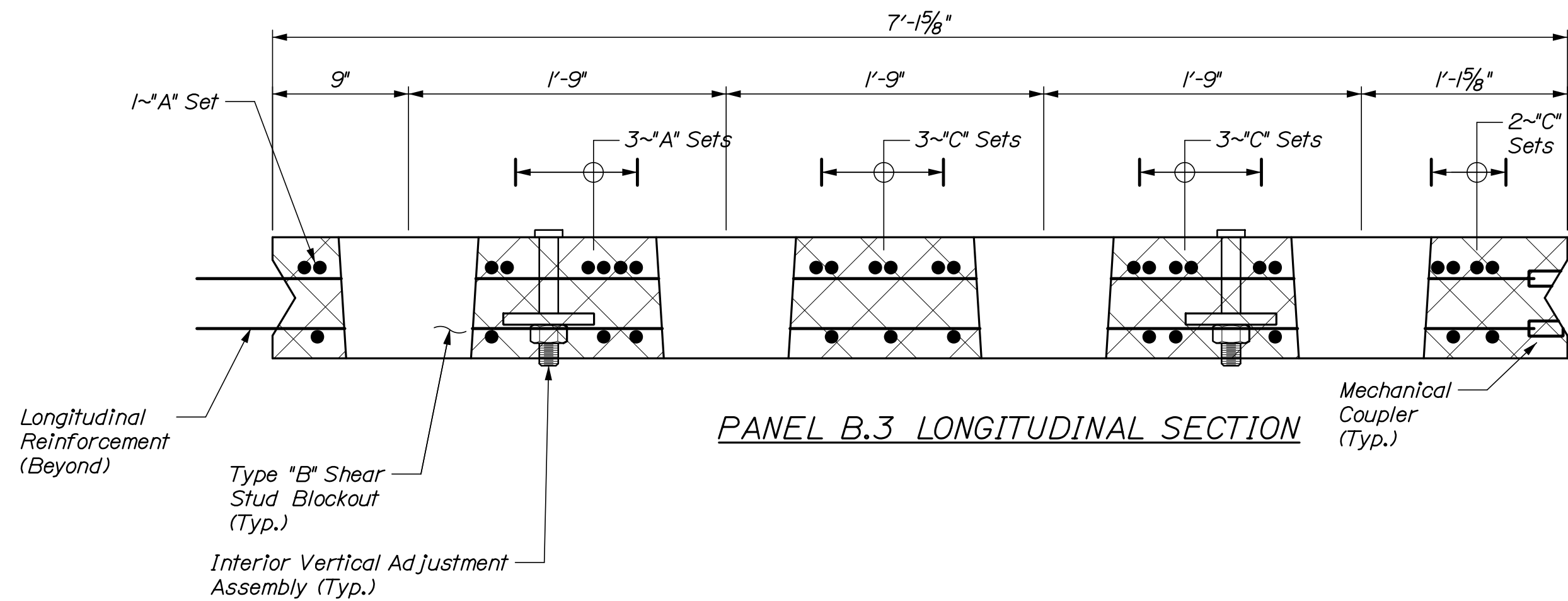
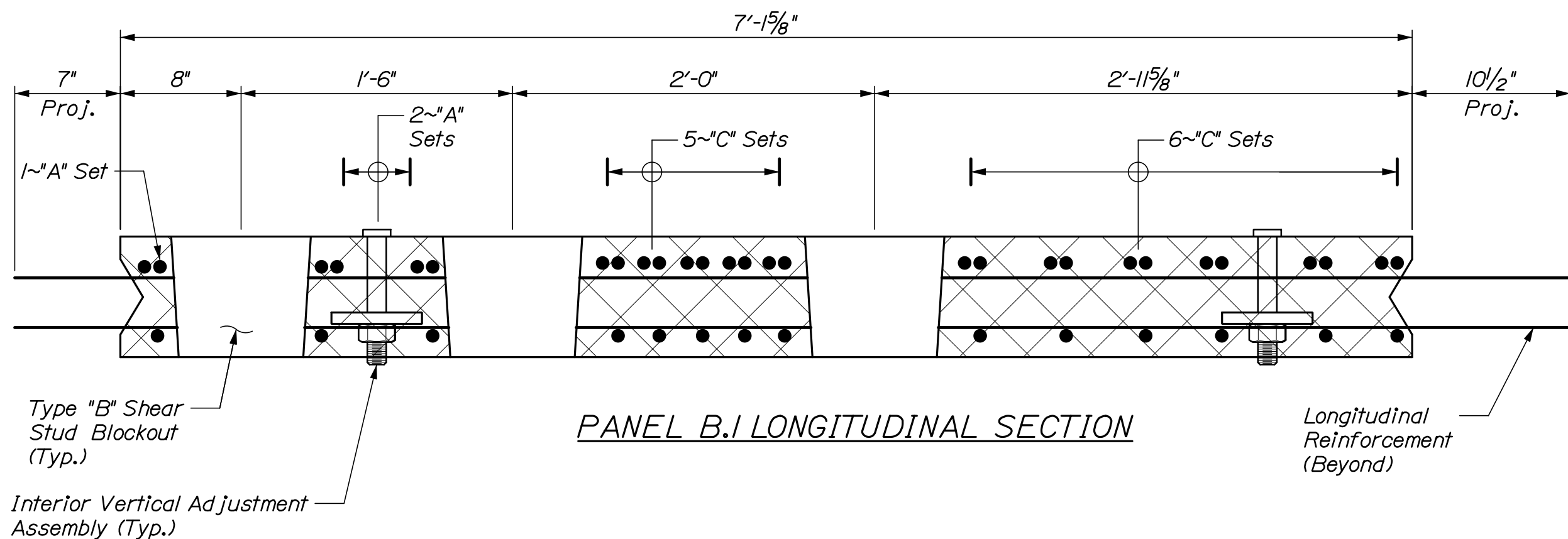
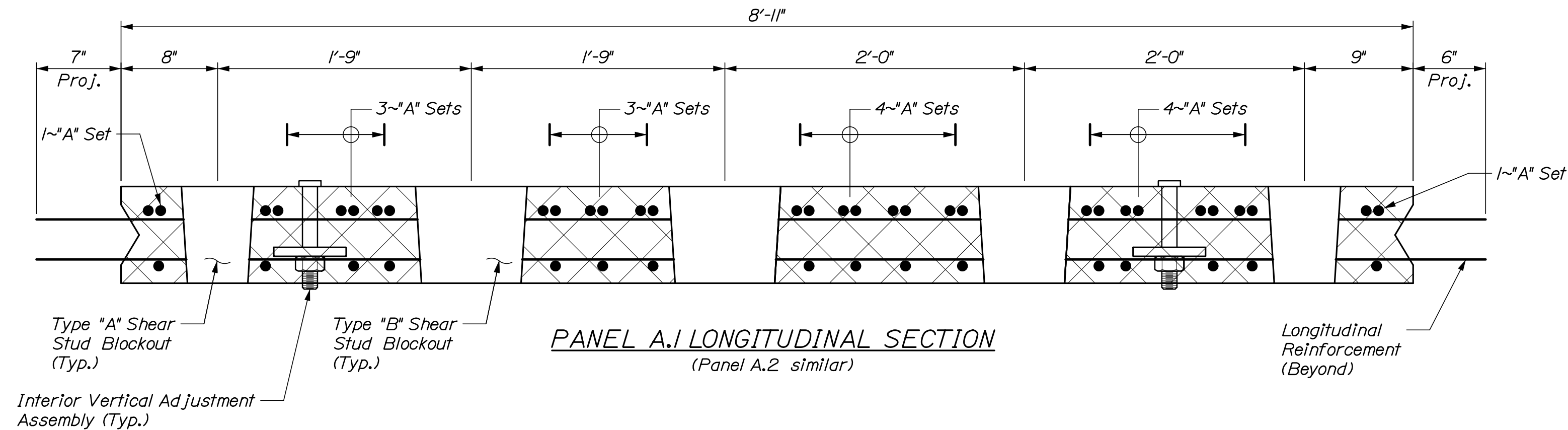
Date:6/18/2015

Username:

Filename: 026_Superstructures_Dets_PanelSections2.dwg

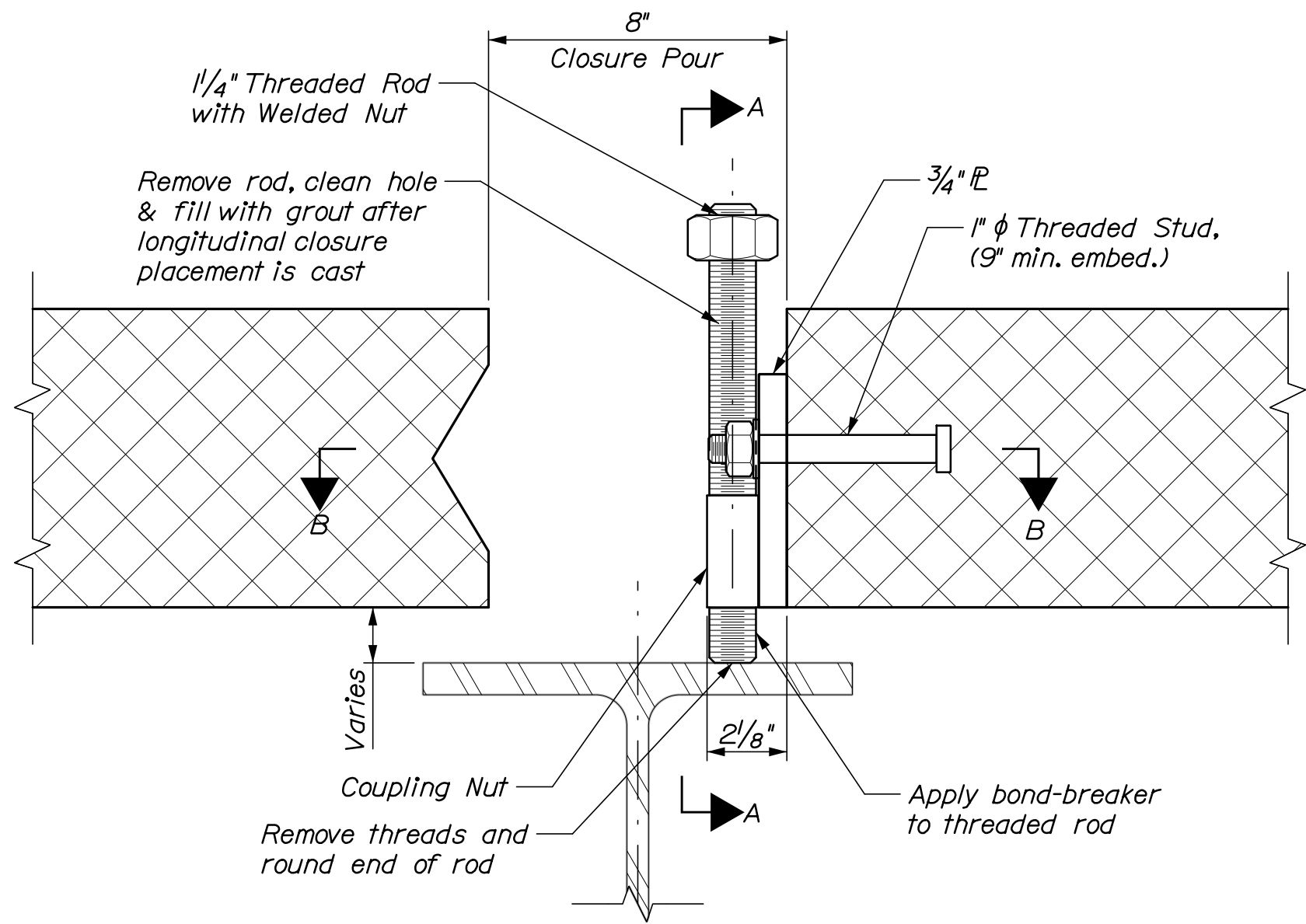


REINFORCING BAR SETS		
Set	Number of bars in set	Bars
A	2	#5
	1	#6
B	1	#5
	1	#5
C	2	#5
	1	#6

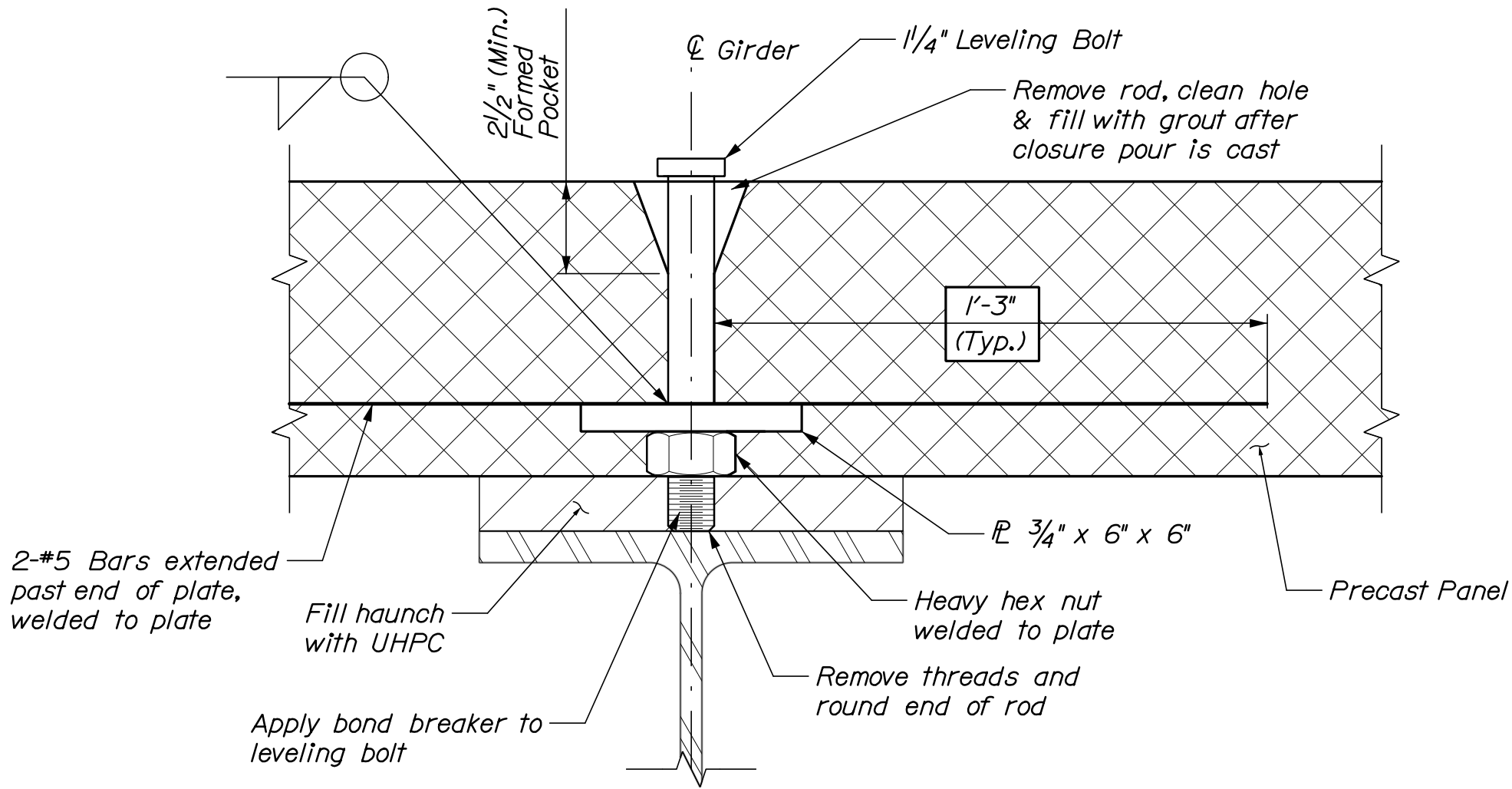


Note:
All longitudinal sections are cut over ϕ fascia girder.

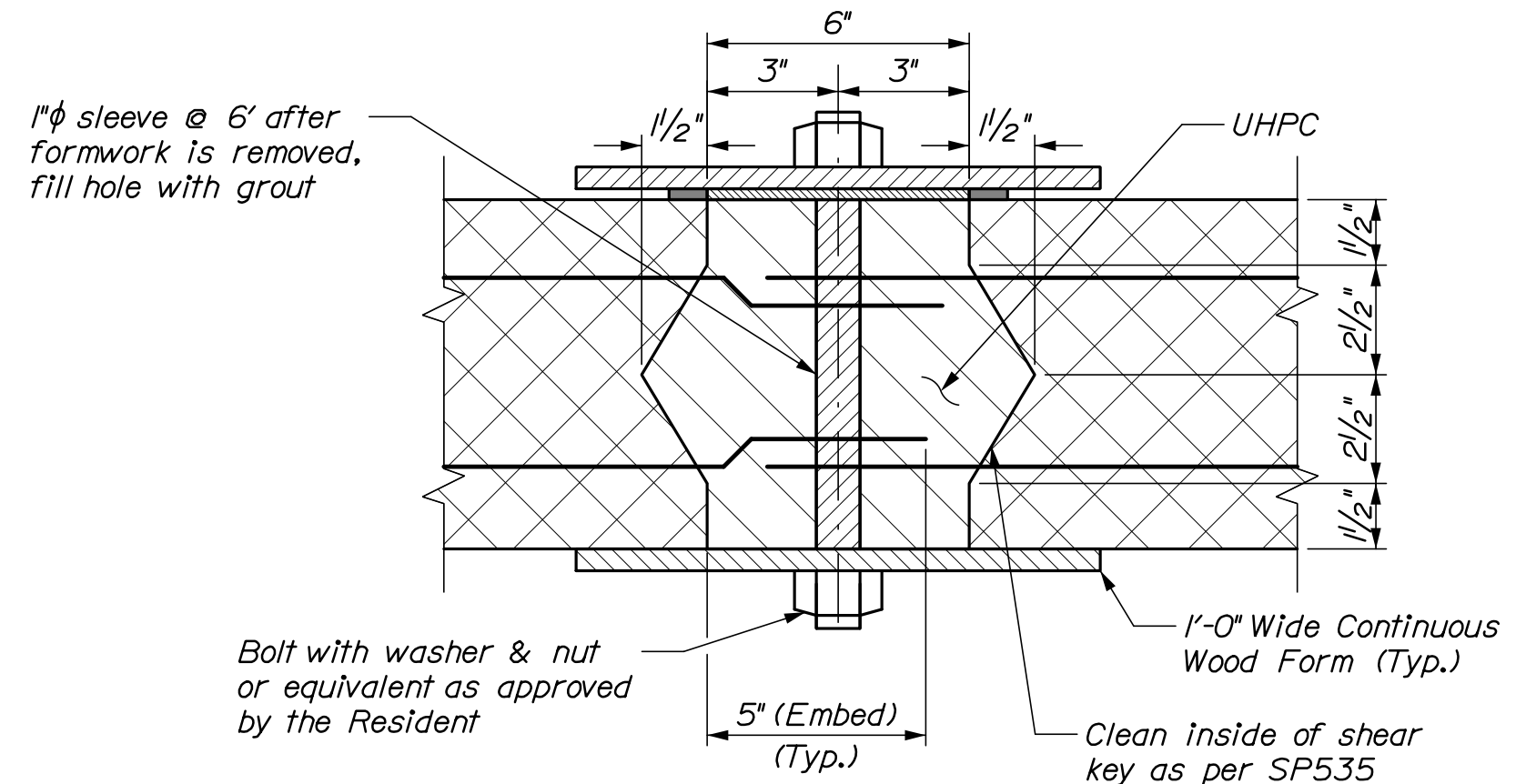
PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	PEB	05/15			
CHECKED-REVIEWED	TRC	05/15			
DESIGN-DETAILED					
DESIGN-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					



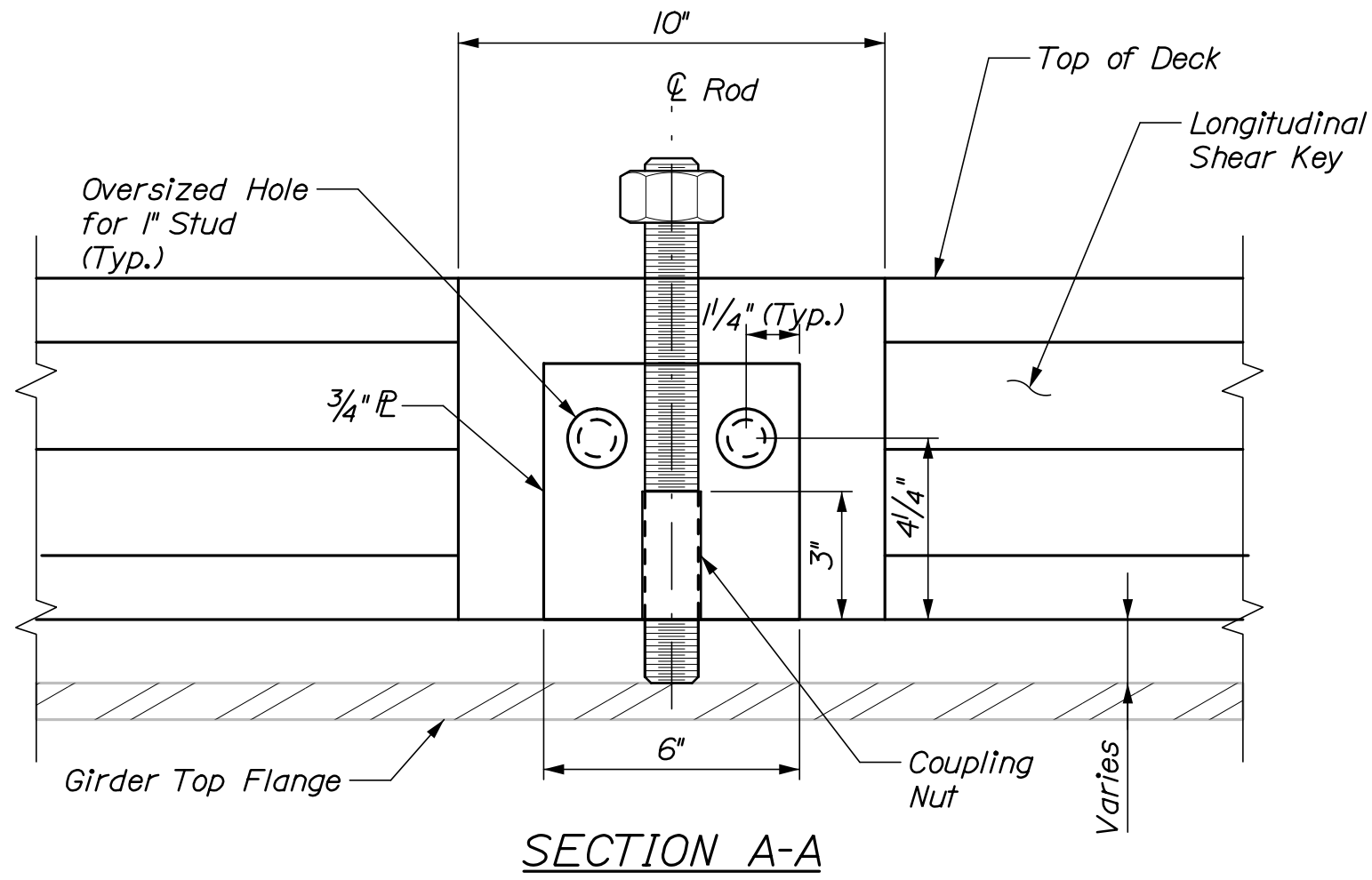
END VERTICAL ADJUSTMENT ASSEMBLY DETAIL



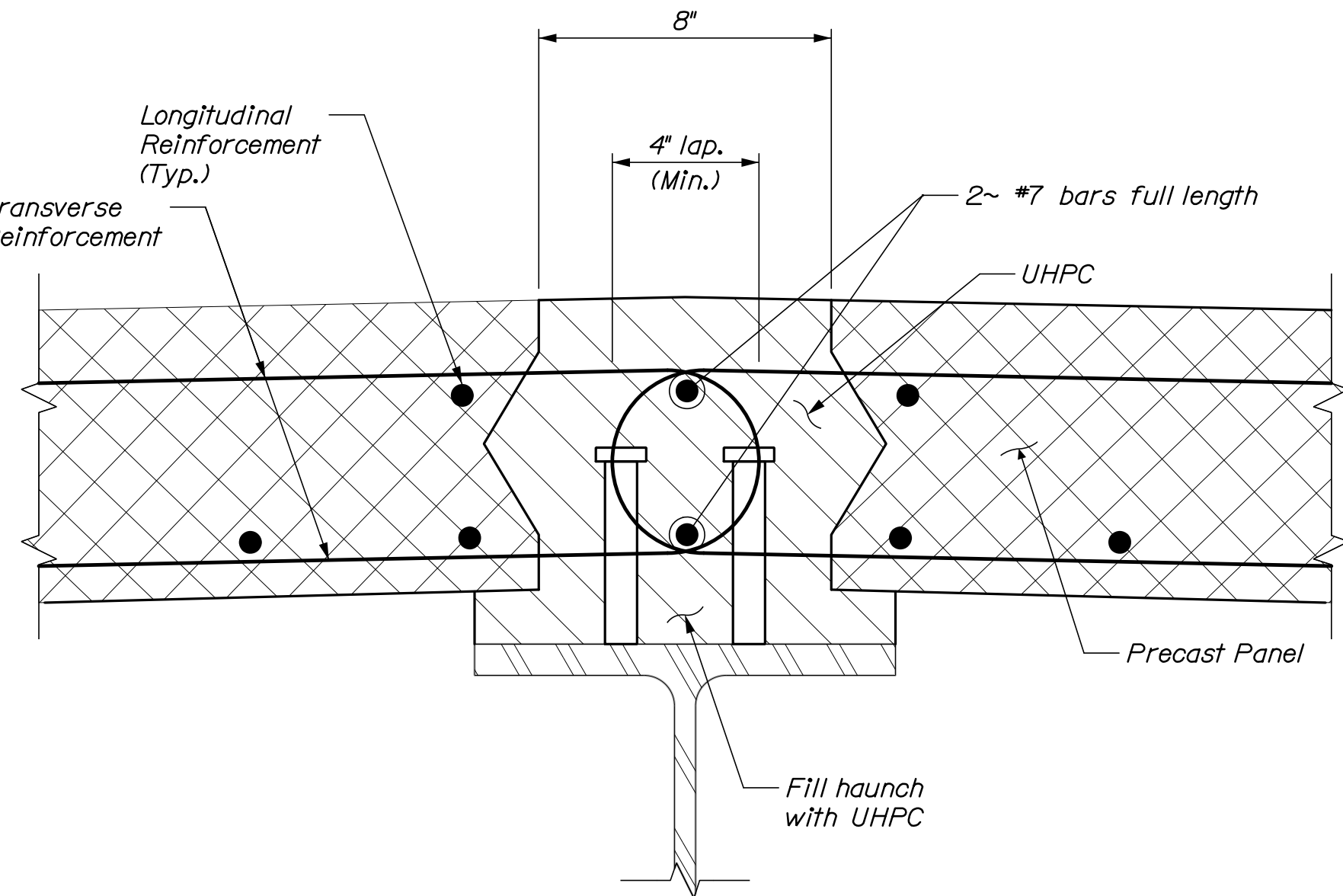
INTERIOR VERTICAL ADJUSTMENT ASSEMBLY DETAIL



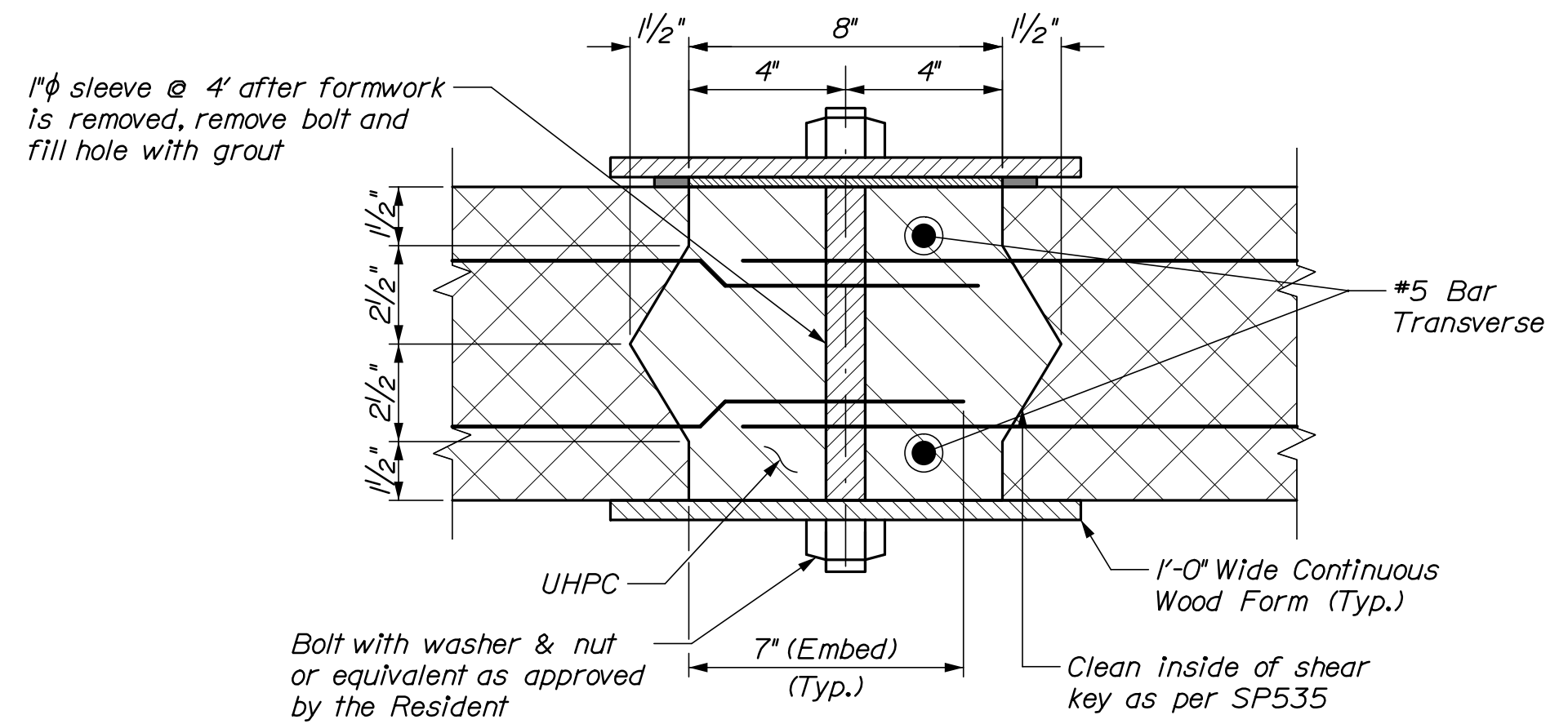
TRANSVERSE UHPC JOINT DETAIL
(Typical Joint)



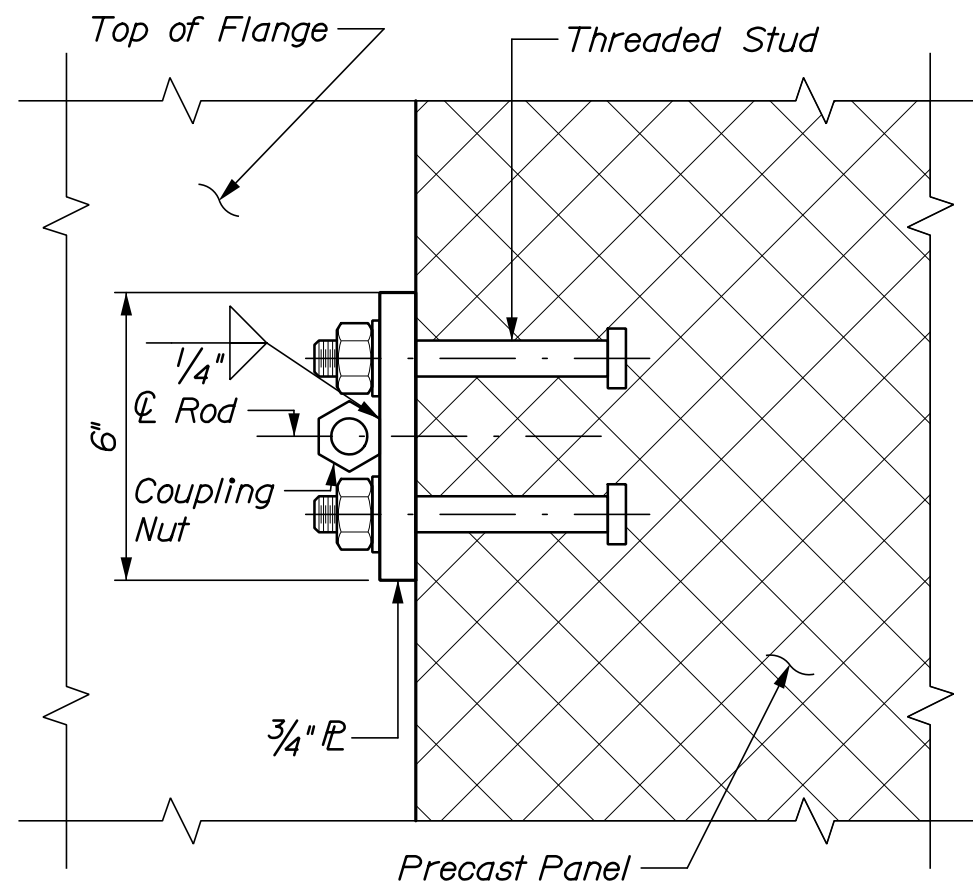
SECTION A-A



LONGITUDINAL CLOSURE PLACEMENT

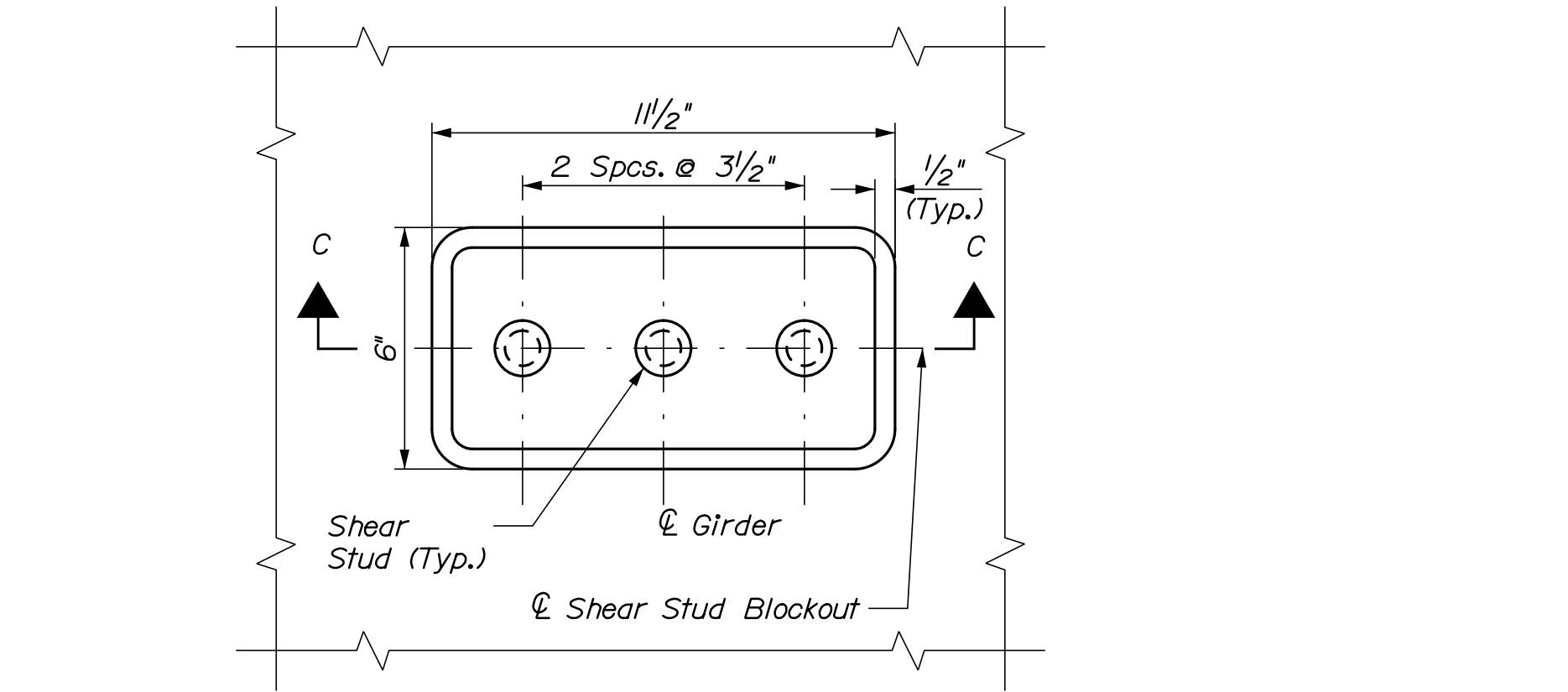


TRANSVERSE UHPC JOINT DETAIL
(Between A.1 and B.2 or A.2 and B.1)

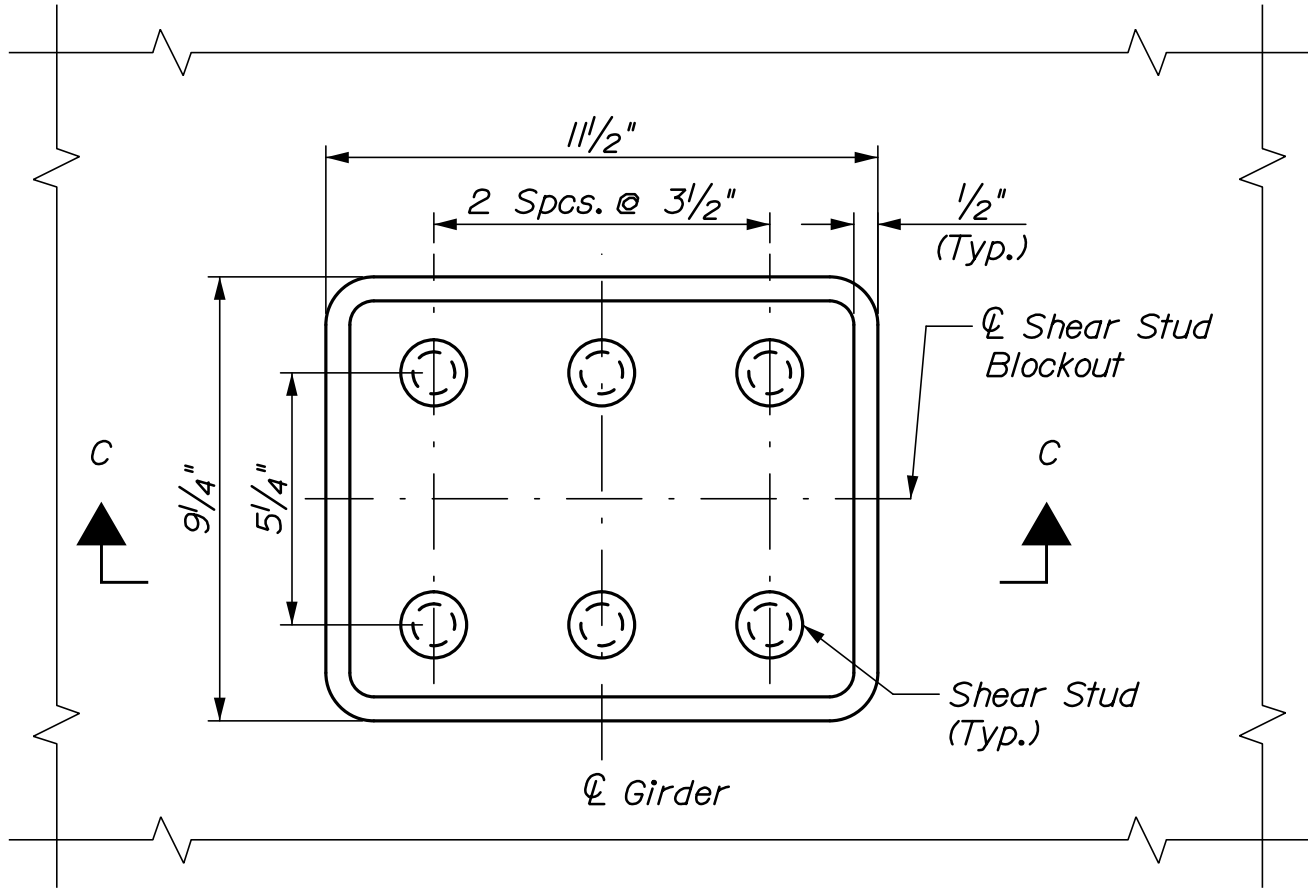


SECTION B-B

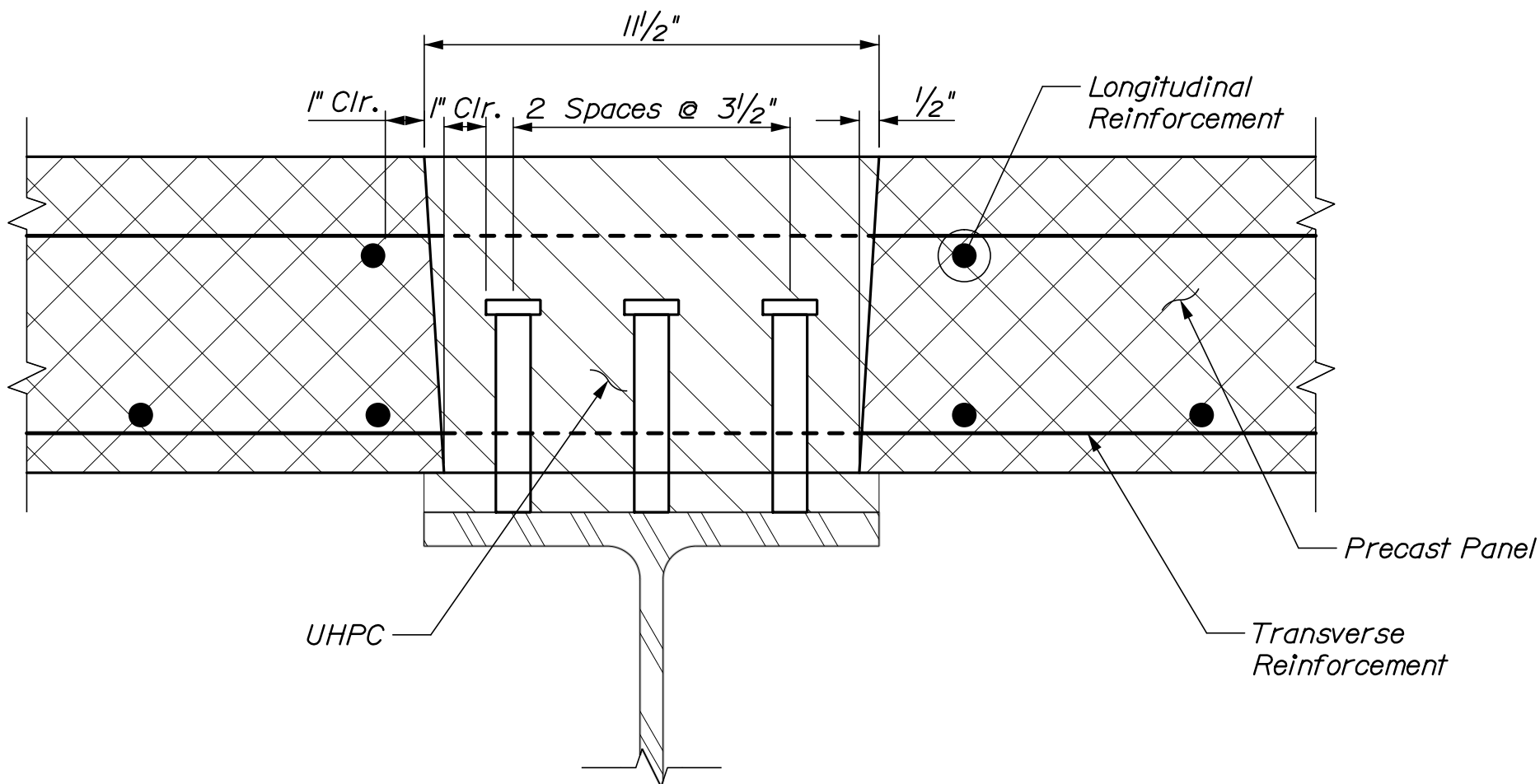
PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	05/15	05/15			
CHECKED-REVIEWED	05/15	05/15			
DESIGN-DETAILED					
DESIGN-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					



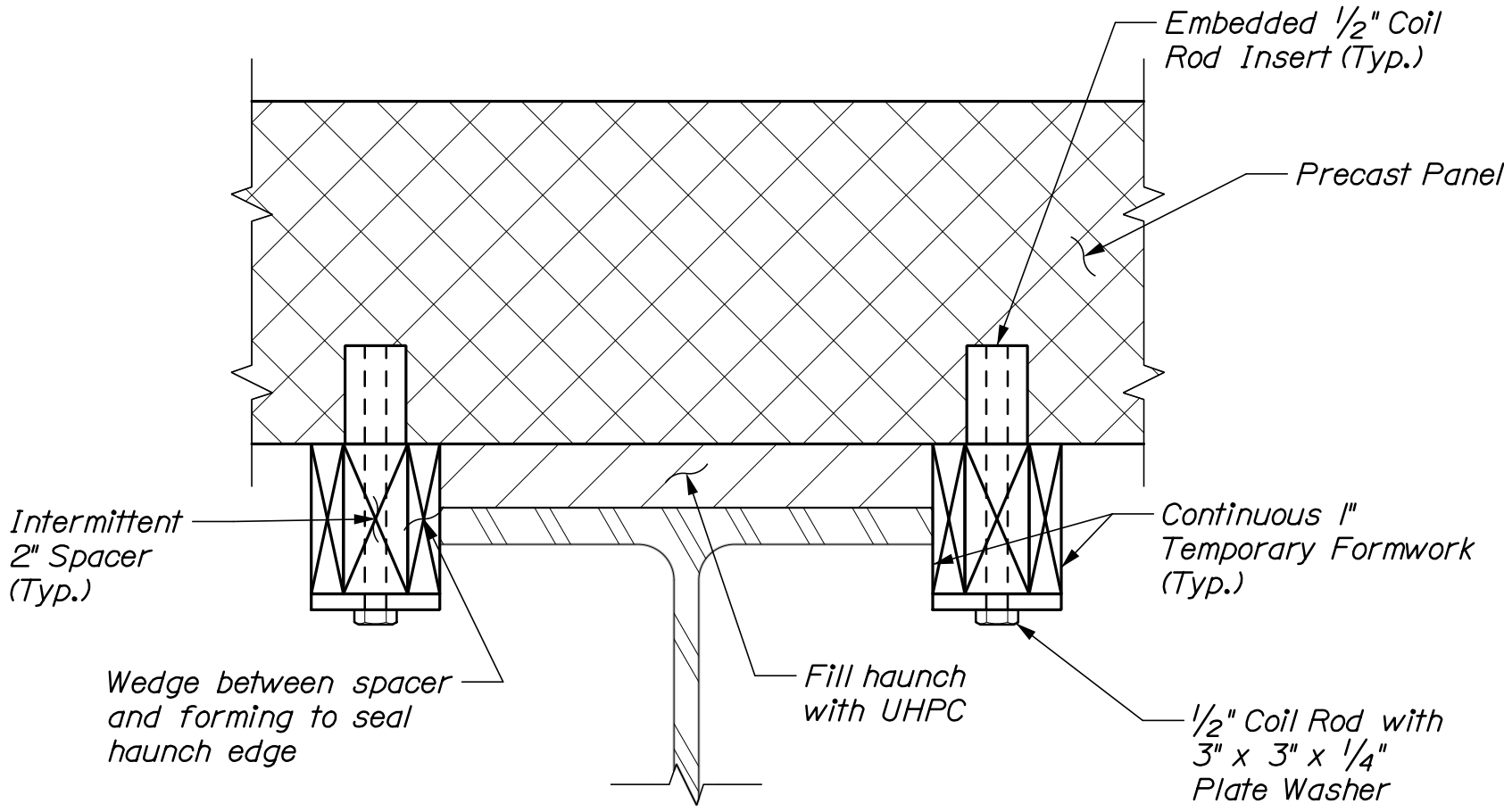
TYPE "A" SHEAR STUD BLOCKOUT PLAN



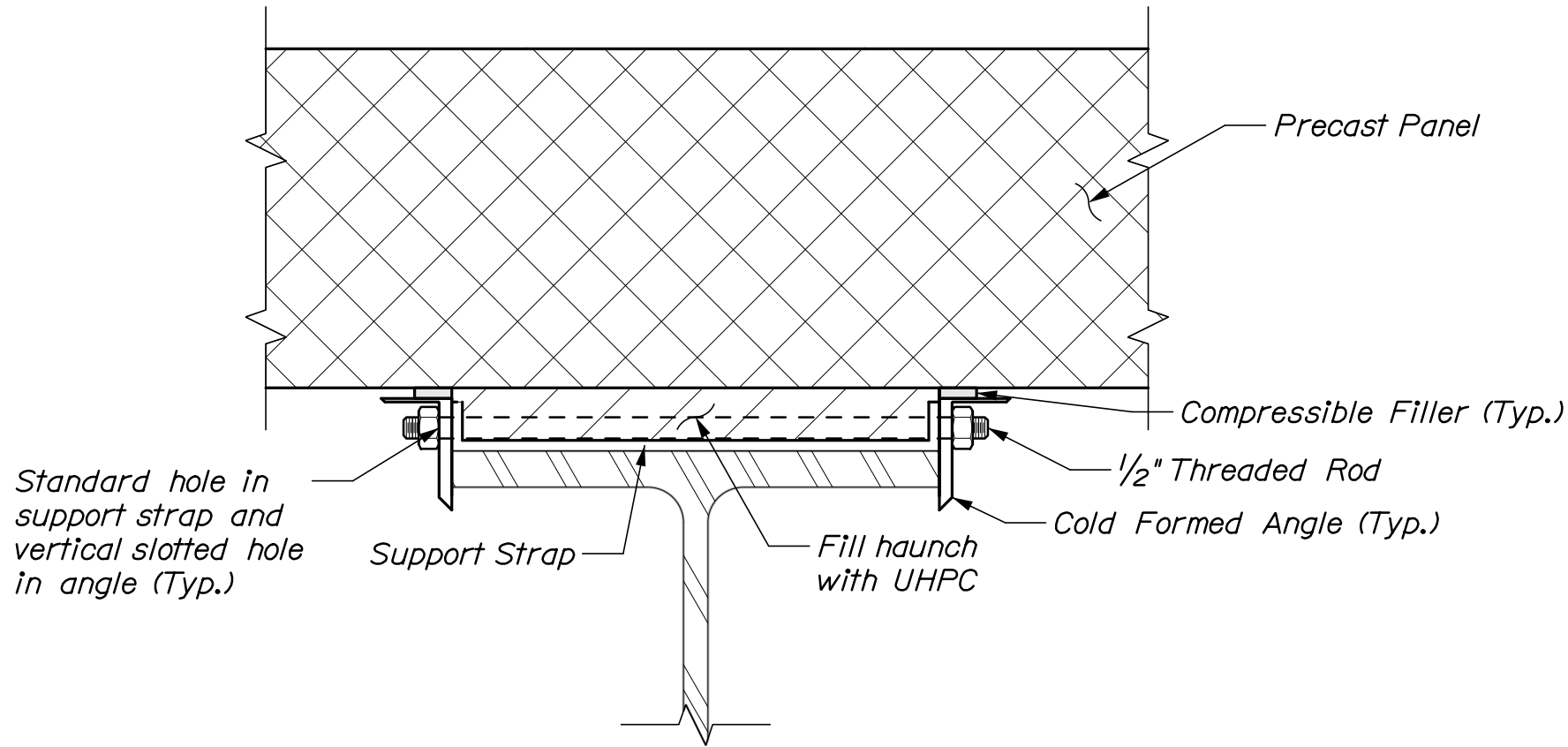
TYPE "B" SHEAR STUD BLOCKOUT PLAN



SECTION C-C



~ ALTERNATE 1 ~



~ ALTERNATE 2 ~

HAUNCH FORMING CONCEPTS

- Notes:
- Two concepts for forming haunch are shown for the Contractor's consideration. Alternate forming methods may be used. The Contractor shall document how the haunch is to be formed in the precast panel submittal. All components not embedded in concrete shall be removed. All components to remain shall be hot dip galvanized.
 - Haunch formwork shall be detailed to prevent leakage when UHPC is placed.
 - Contractor shall coordinate with Precaster for any inserts required for haunch forming. Field drilling of deck panels will not be allowed.

28 OF 33	SHEET NUMBER	WESTERN AVENUE BRIDGE INTERSTATE 95 FAIRFIELD SOMERSET COUNTY										STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
		PROJ. MANAGER		M. Perrin	BY	DATE	SIGNATURE					STP-2048(300)	
		DESIGN-DETAILED		JDW	05/15								
		CHECKED-REVIEWED		KEB	TRC	05/15							
		DESIGN2-DETAILED2		-	-	-	P.E. NUMBER					WIN	
DESIGN3-DETAILED3		-	-	-	DATE	BRIDGE NO. 5819							20483.00
REVISIONS 1		-	-	-									
REVISIONS 2		-	-	-									
REVISIONS 3		-	-	-									
REVISIONS 4		-	-	-									
FIELD CHANGES		-	-	-									

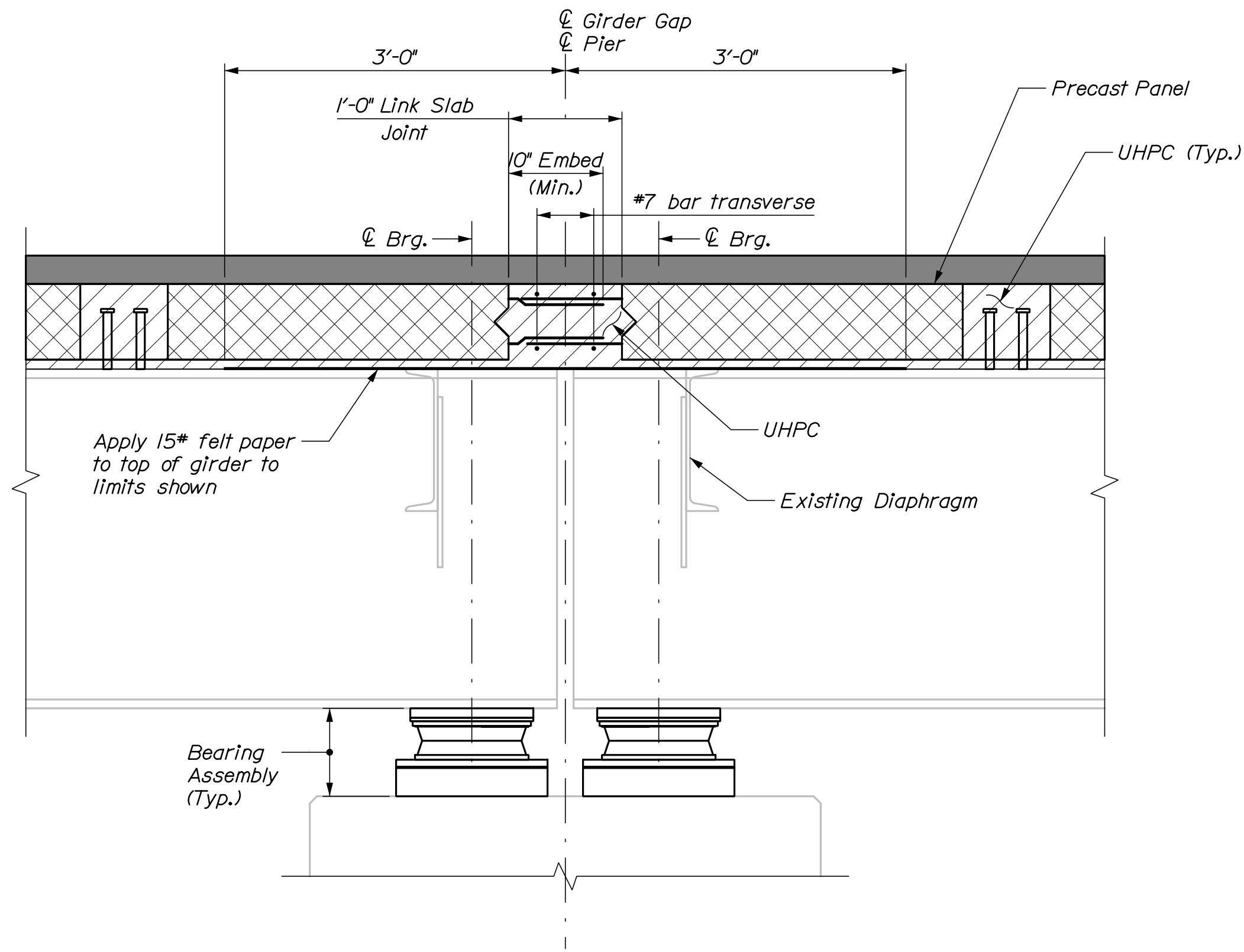
WESTERN AVENUE BRIDGE		SOMERSET COUNTY	
INTERSTATE 95			
FAIRFIELD			
SUPERSTRUCTURE DETAILS			
PANEL DETAILS 2			

SHEET NUMBER	
28	
OF 33	

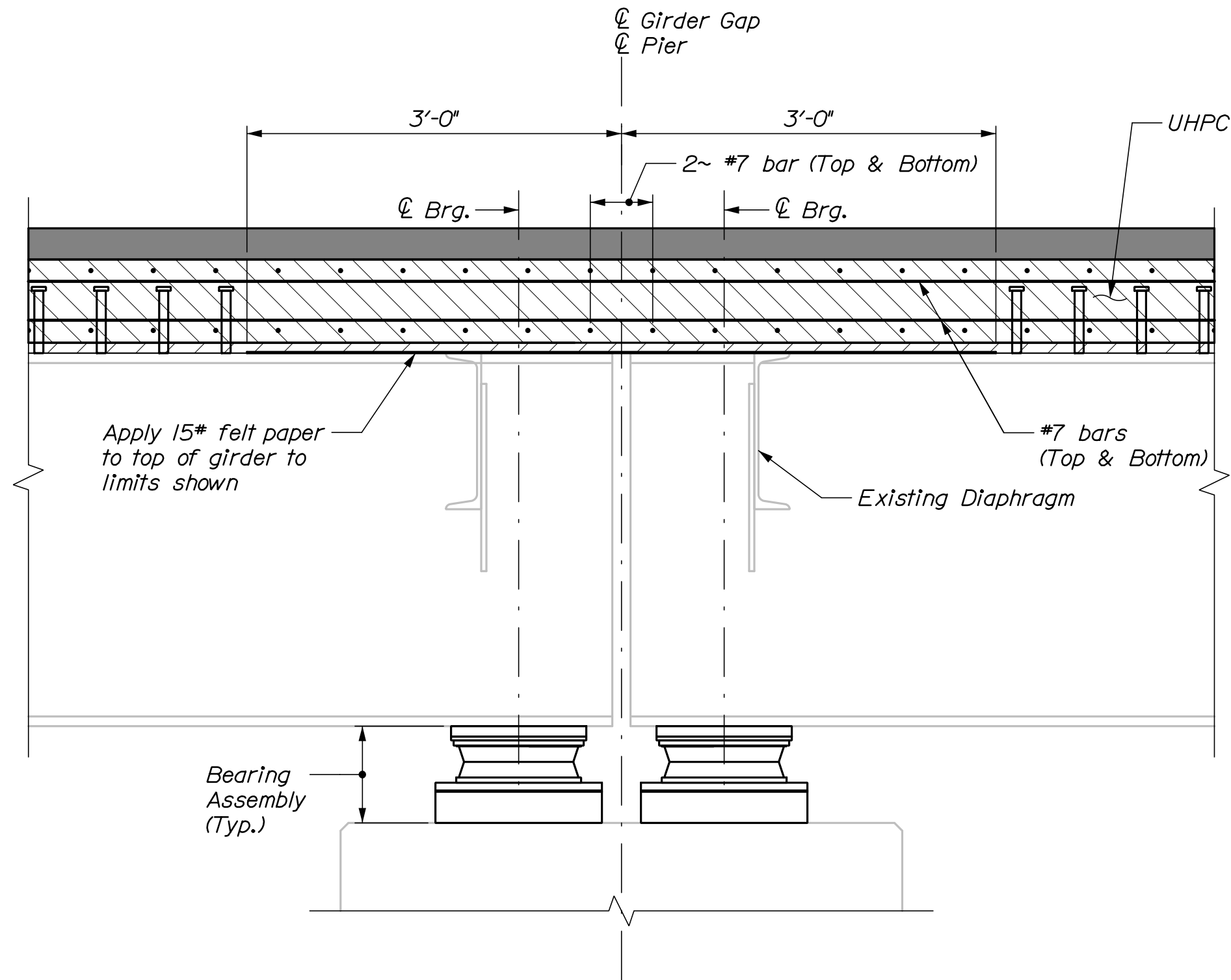
Date:6/18/2015

Username:

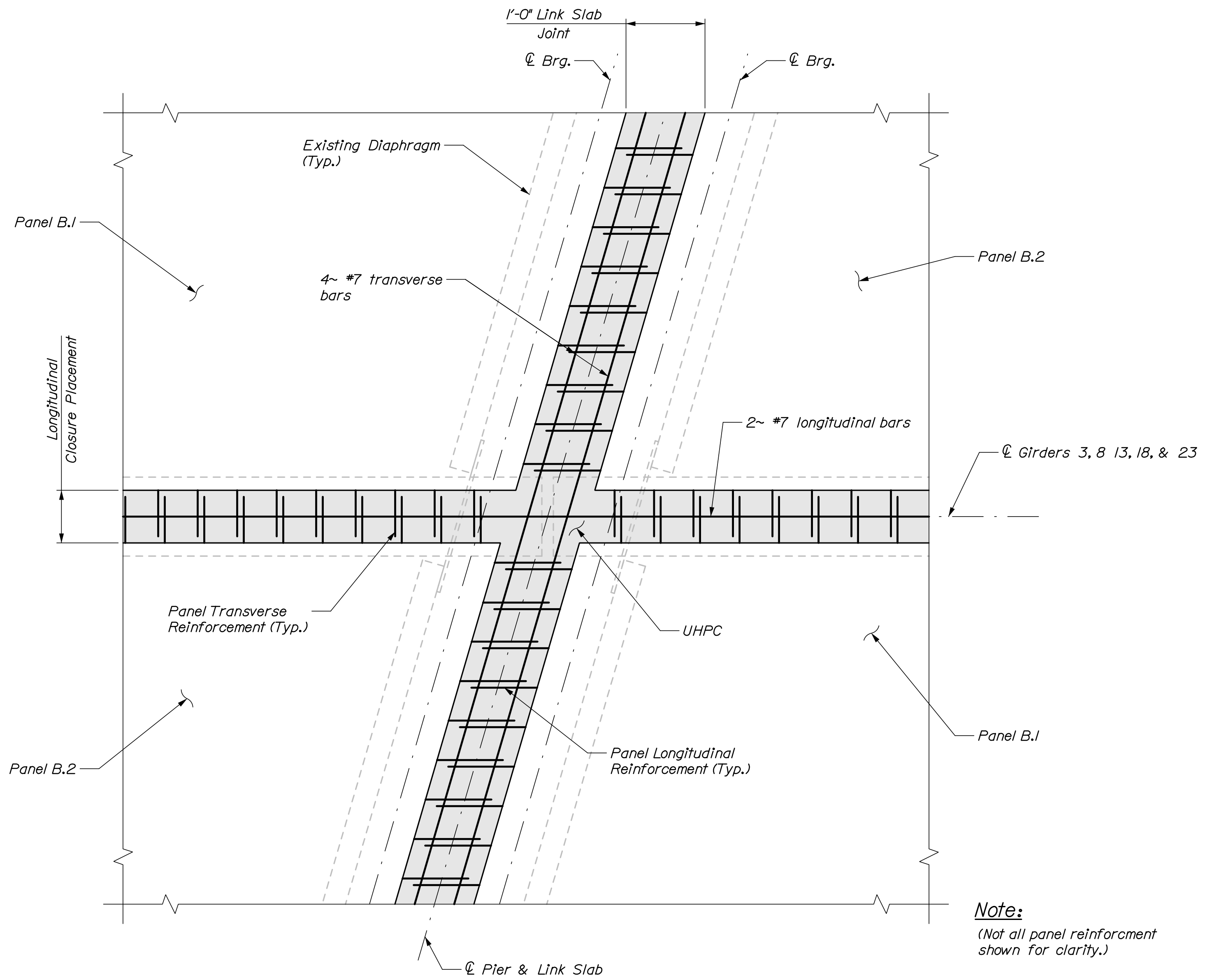
Filename: 029_Superstructures_Dets_LinkSlab.dgn Division:



LINK SLAB DETAIL THROUGH PRECAST PANEL



LINK SLAB DETAIL THROUGH LONGITUDINAL CLOSURE PLACEMENT



LINK SLAB & LONGITUDINAL CLOSURE PLACEMENT PLAN

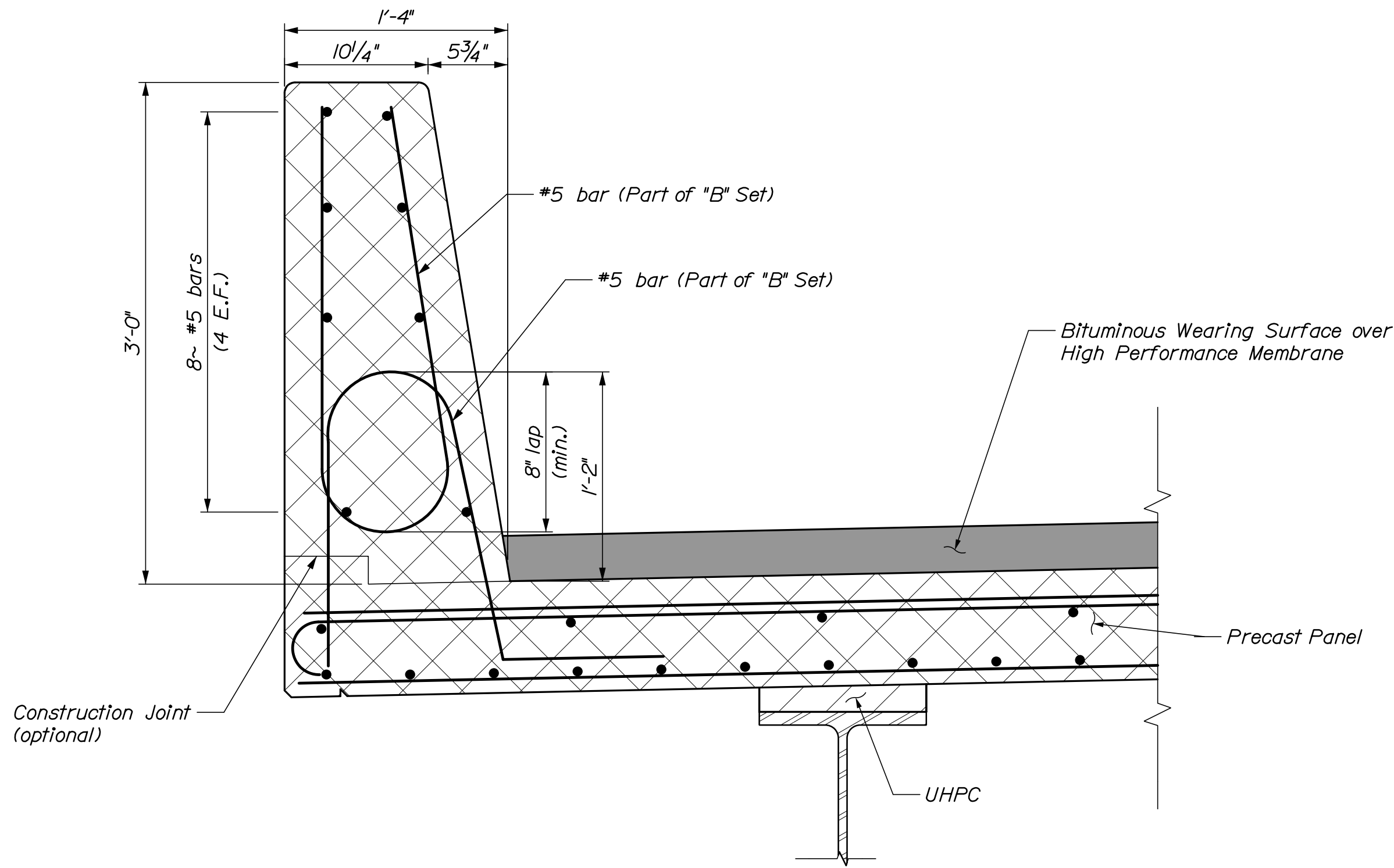
Note:
(Not all panel reinforcement shown for clarity.)

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	JWB	PEB	05/15
CHECKED-REVIEWED	KEB	TRC	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

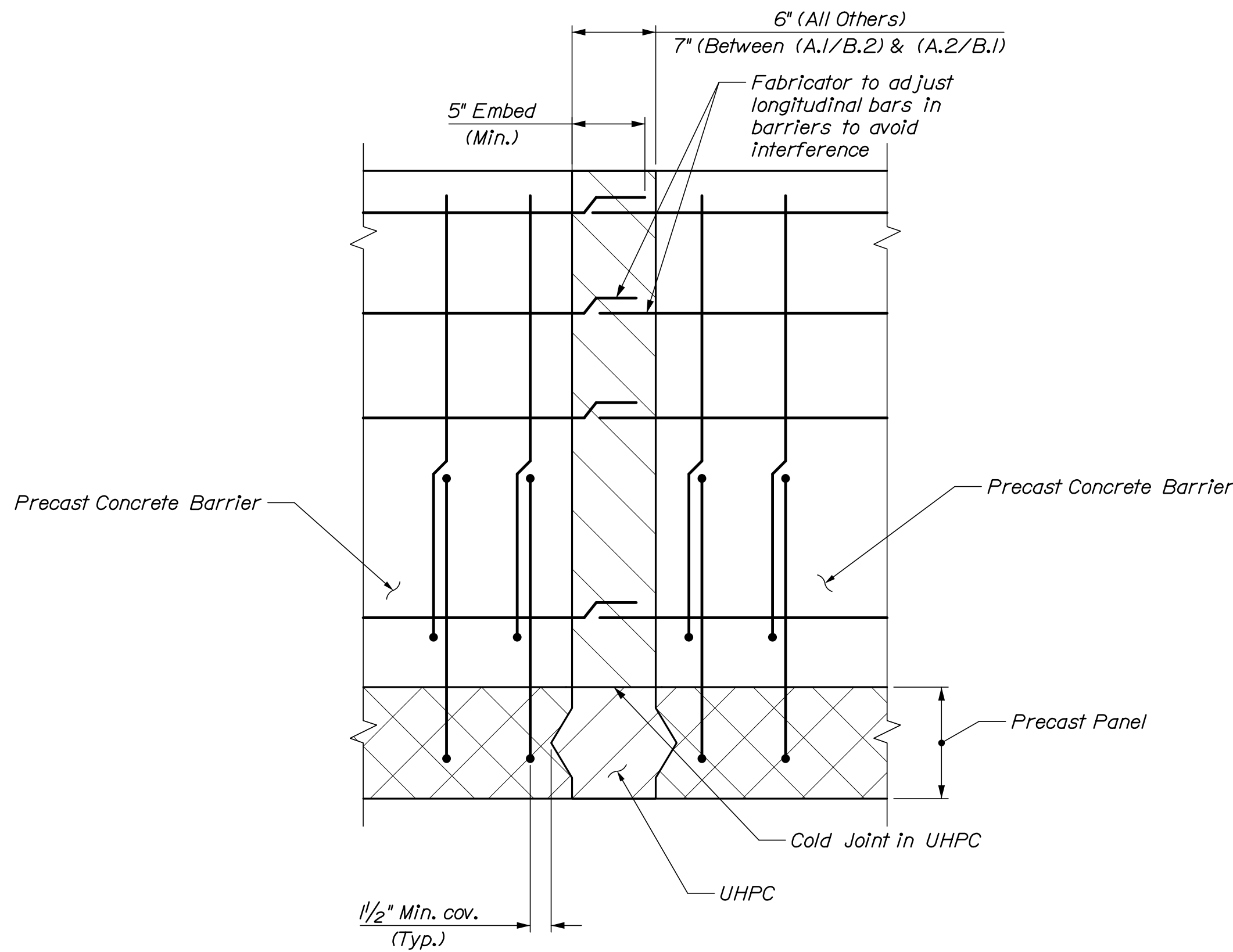
Date:6/18/2015

Username:

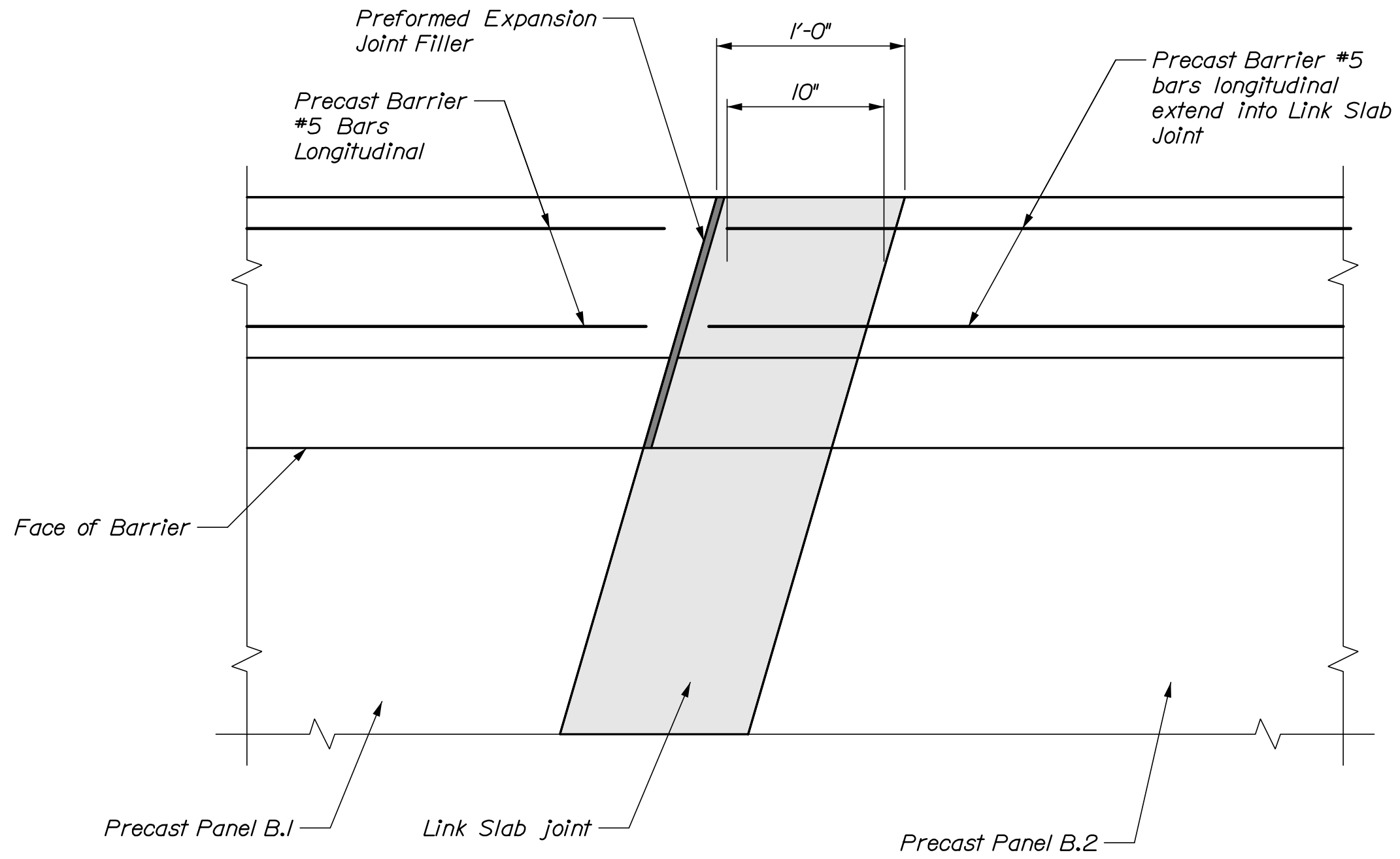
Filename: 030_Superstructures_Dets_Barrier.dgn Division:



SINGLE SLOPE CONCRETE BARRIER DETAIL



TRANSVERSE JOINT AT BARRIER
Panel reinforcement not shown for clarity

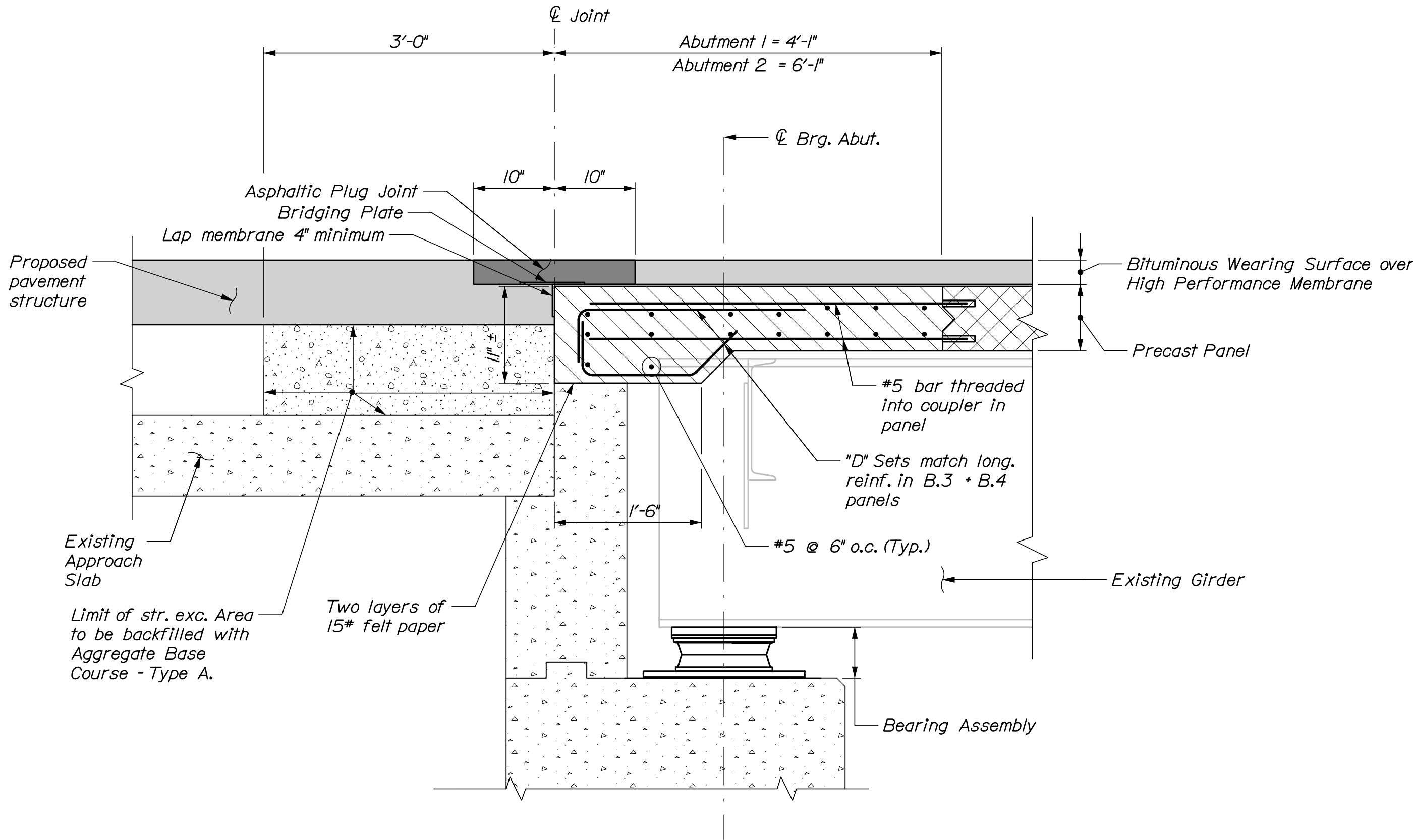


BARRIER JOINT AT LINK SLAB
(Plan View)

Notes:

1. Preformed joint filler shall conform to ASTM D1752, Type 1 or ASTM D5249, Type 2. Preformed joint filler shall be a non-staining, non-bleeding type. Cork is not acceptable joint filler material.
2. Entire exposed surface of preformed joint filler joint shall be sealed with a polyurethane joint sealant approved by the Resident.
3. Joint shall be 1/2" wide and shall be constructed adjacent to Precast Panel B.1 and barrier transverse joint above Link Slab joint.

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	JOW	PEB	05/15
CHECKED-REVIEWED	KEB	TRC	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

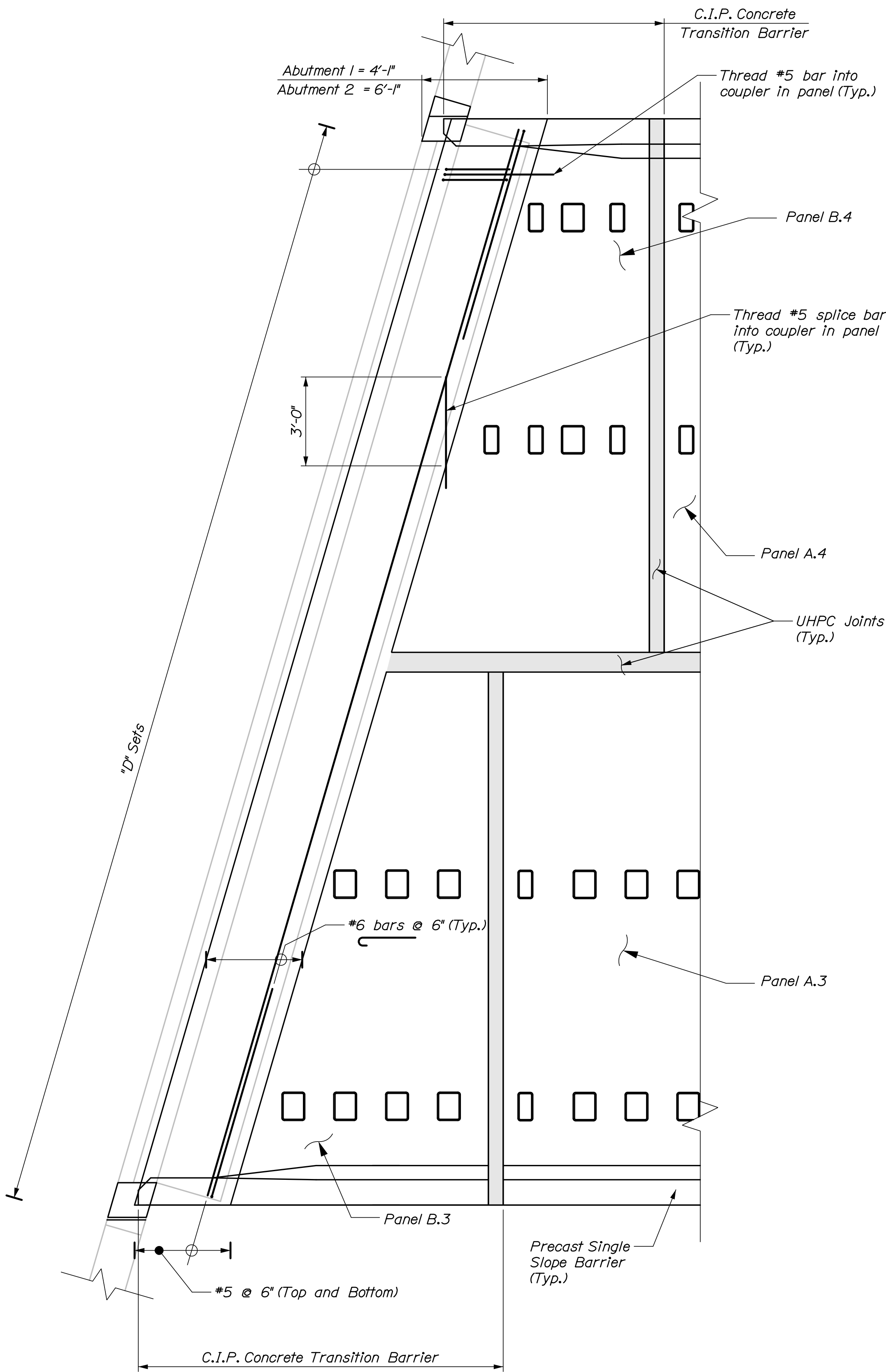


END CLOSURE JOINT SECTION

ASPHALTIC PLUG JOINT NOTES:

1. Asphaltic plug joint materials shall meet the requirements of the project specifications and shall be installed in accordance with the manufacturer's recommendation.
2. Asphaltic plug joints shall be installed after the second lift of pavement is installed.
3. PVC 1\"/>

REINFORCING BAR SETS			
Set	Number of bars in set	Bars	
D	1	#5	
	1	#5	



END CLOSURE JOINT PLAN
(Abutment no. 1 shown, Abutment no. 2 similar)

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

STP-2048(300)

BRIDGE NO. 6819

WIN 20483.00

BRIDGE PLANS

WESTERN AVENUE BRIDGE

INTERSTATE 95

SOMERSET COUNTY

FAIRFIELD

SUPERSTRUCTURE DETAILS

END CLOSURE DETAILS

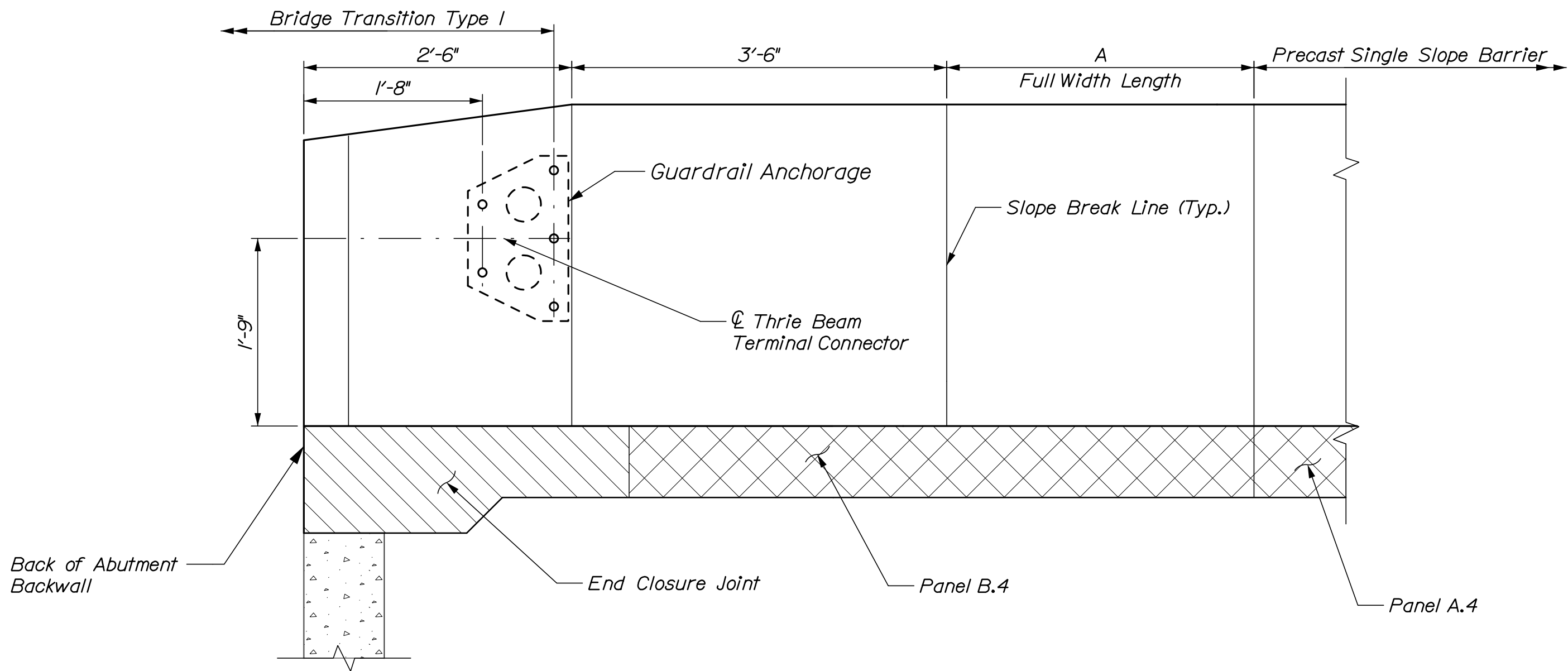
SHEET NUMBER

31

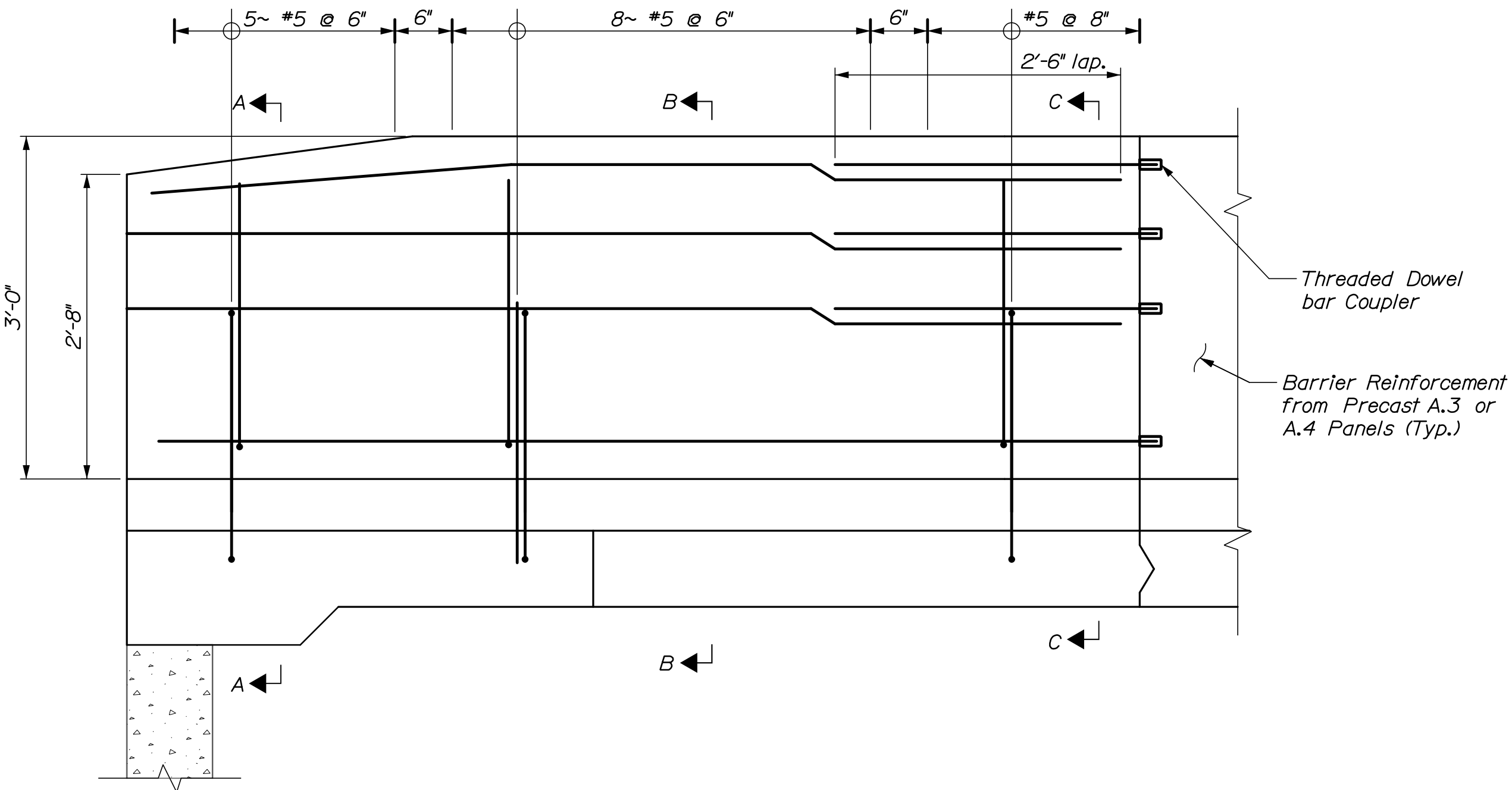
OF 33

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	J.W.	PEB	05/15
CHECKED-REVIEWED	KEB	TRC	05/15
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

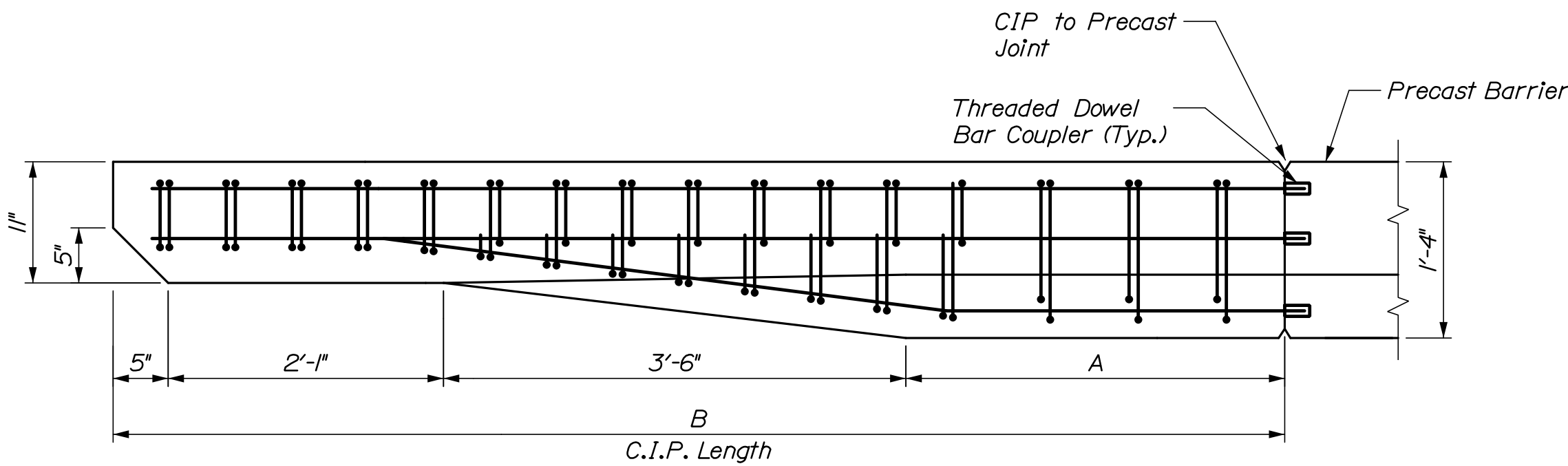
SIGNATURE	P.E. NUMBER	DATE



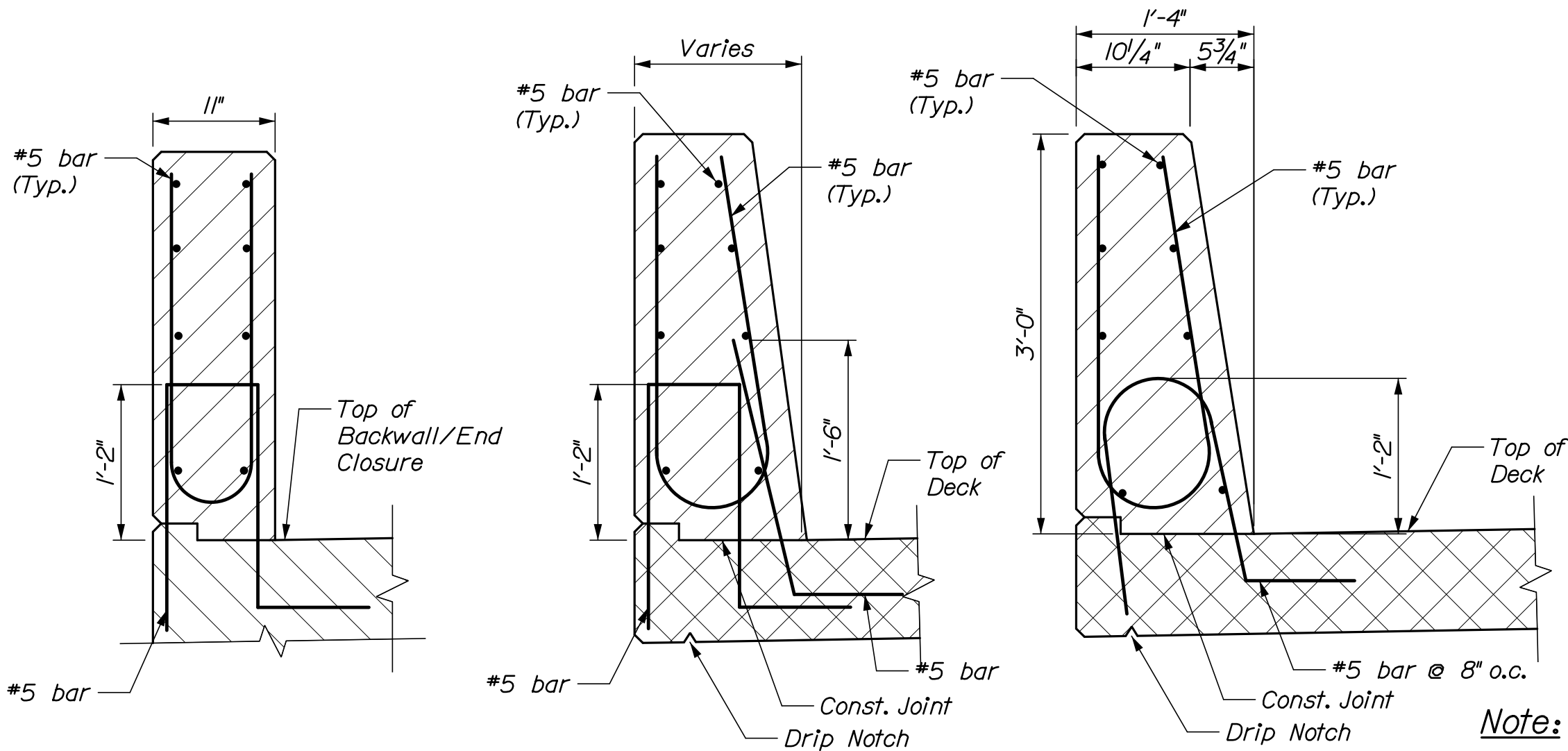
INSIDE ELEVATION



OUTSIDE ELEVATION
(NW Corner Shown,
Other Corners similar)



PLAN



Note:
Deck reinforcement
not shown for clarity

TRANSITION BARRIER DIMENSIONS

Location	A Full-width length	B CIP barrier length
Abut. 1 North	1'-5 ⁵ / ₁₆ "	7'-5 ⁵ / ₁₆ "
Abut. 1 South	6'-6 ¹³ / ₁₆ "	12'-6 ¹³ / ₁₆ "
Abut. 2 North	8'-3 ¹³ / ₁₆ "	14'-3 ¹³ / ₁₆ "
Abut. 2 South	2'-11 ³ / ₁₆ "	9'-0 ⁵ / ₈ "

Notes:
1. Guardrail anchorage shall be
as shown in Standard Detail
526(24).

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

STP-2048(300)

BRIDGE NO. 6819

WIN

20483.00

BRIDGE PLANS

WESTERN AVENUE BRIDGE

INTERSTATE 95

SOMERSET COUNTY

FAIRFIELD

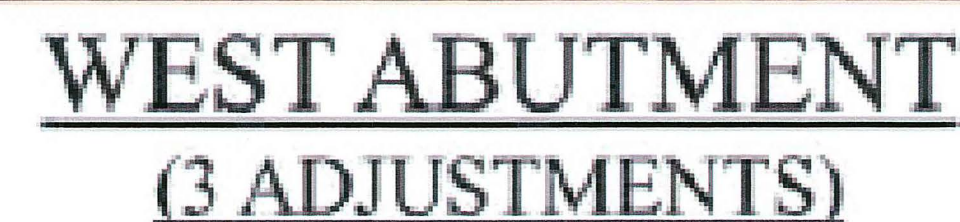
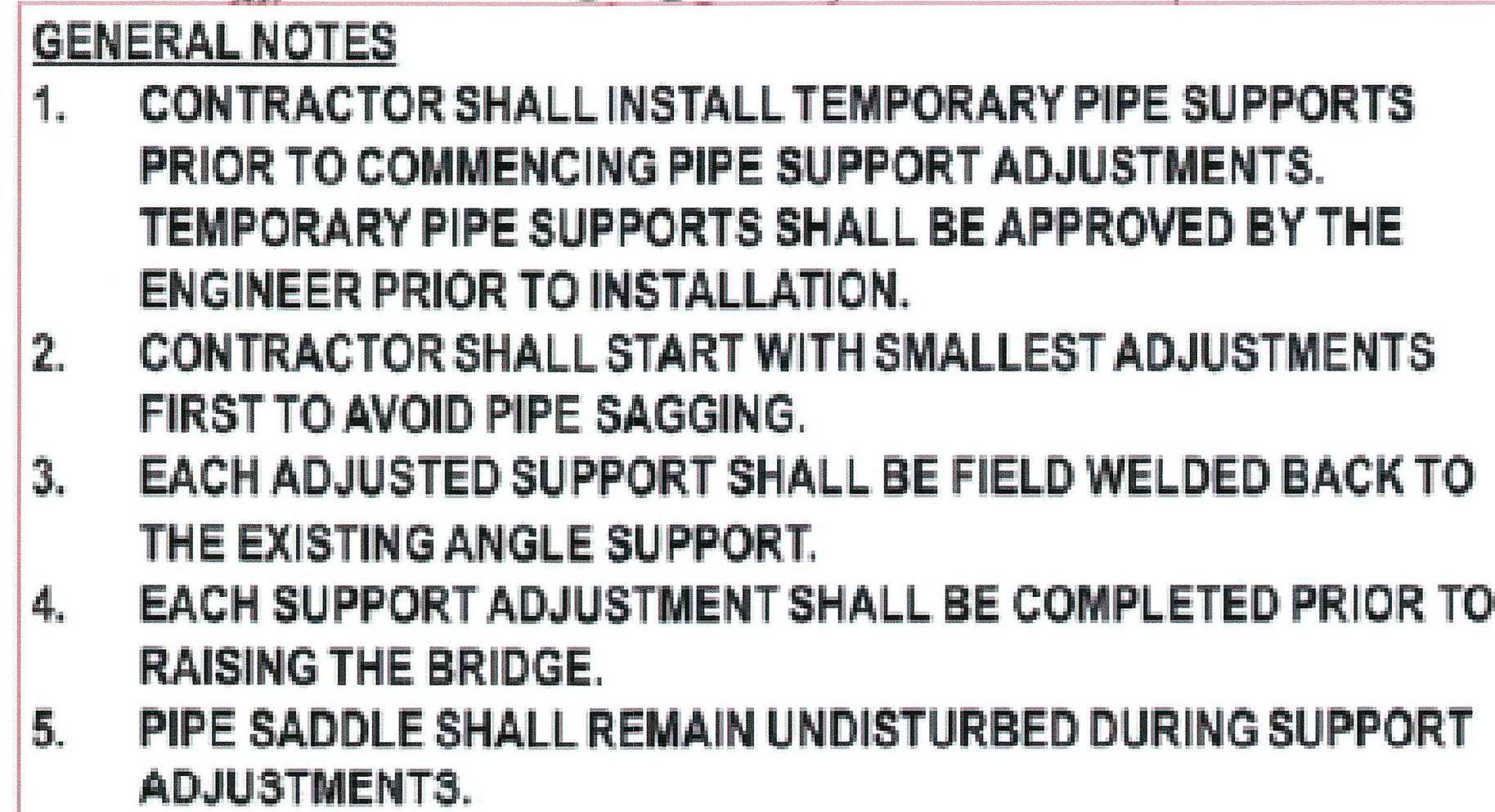
MODIFIED TRANSITION BARRIER

SHEET NUMBER

32

OF 33

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	05/15	PEB	05/15			
CHECKED-REVIEWED	05/15	TRC	05/15			
DESIGN-DETAILED	-	-	-			
DESIGN-DETAILED	-	-	-			
REVISIONS 1	-	-	-			
REVISIONS 2	-	-	-			
REVISIONS 3	-	-	-			
REVISIONS 4	-	-	-			
FIELD CHANGES	-	-	-			



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Seventh Edition 2014 with 2015 Interim Provisions.

DESIGN LOADING

Live Load HL - 93

TRAFFIC DATA

	NB	SB
Current (2013) AADT	12,510	11,510
Future (2033) AADT	15,010	13,810
DHV - % of AADT	13%	12%
Design Hour Volume	1,951	1,657
Heavy Trucks (% of AADT)	18%	17%
Heavy Trucks (% of DHV)	18%	17%
Directional Distribution (% of DHV)	100%	100%
18 kip Equivalent P 2.0	3,192	3,147
18 kip Equivalent P 2.5	3,040	2,998
Design Speed (mph)	65	65

MATERIALS

Concrete:	
Curbs, Permanent Barrier & Transition Barriers	Class "LP"
Slope Repairs	Class "Fill"
All Other	Class "A"
Reinforcing Steel	
Decks, Curbs, Permanent Barrier & Transition Barriers	ASTM A 775, (Epoxy-Coated) Grade 60
All Other	ASTM A 615, Grade 60

BASIC DESIGN STRESSES

Concrete, Class Fill	F'c = 3,000 psi
Concrete, Class A	F'c = 4,000 psi
Concrete, Class LP	F'c = 5,000 psi
Reinforcing Steel	fy = 60,000 psi

FAIRFIELD
SOMERSET COUNTY
INTERSTATE 95 BRIDGE
OVER
ROUTE 201
FEDERAL AID PROJECT NO. NHPP-2048(900)
PROJECT LENGTH 0.116 mi.
BRIDGE NO. 5820

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities	2
General Notes	3
General Plan	4-5
Typical Sections and Special Details	6
Cross Sections	7-11
Maintenance of Traffic and Sign Summary	12-21
Temporary Ramp General Plan	22
Temporary Ramp Profile	23
Temporary Ramp Typical Section and Details	24
Temporary Ramp Cross Sections	25-29
Boring Logs	30
Construction Staging	31-32
Abutment and Wingwall Modifications	33
Bearing Details	34
Shear Connector Layout	35
Superstructure Plan	36
Typical Section	37
Reinforcing Plan	38
Superstructure Details	39-40
Miscellaneous Details	41
Reinforcing Steel Schedule	42

UTILITIES

Central Maine Power	Kennebec Water District
Fairpoint Communications	Town of Fairfield Sewer
Time Warner Cable	Maine Department of Transportation

MAINTENANCE OF TRAFFIC

Phased construction maintaining one lane of through traffic in both northbound and southbound directions with the use of median crossovers. Northbound on-ramp closed and northbound off ramp relocated to a temporary off-ramp during Phase 1. All ramps open during Phase 2.

PROJECT LOCATION:	Interstate 95 over Route 201 Bridge, located at Mile 133, Latitude 44° 36'06" N, Longitude 69° 35'55" W
PROGRAM AREA:	Bridge
OUTLINE OF WORK:	Bridge Deck Replacement



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
	COMMISSIONER: [Signature]	6/30/15
	CHIEF ENGINEER: [Signature]	6/29/15

STATE OF MAINE DEPARTMENT OF TRANSPORTATION ROLAND A. LAVALLÉE No. 6462 Professional Engineer	SIGNATURE [Signature] 6/29/15 P.E. NUMBER 6522 DATE 6/29/15
---	---

PROJECT INFORMATION	BRIDGE	MARK PARLIN	TW COTE P.E.	INTB	PROJECT RESIDENT	CONTRACTOR	PROJECT COMPLETION DATE
PROGRAM	PROJECT MANAGER	DESIGNER	CONSULTANT	PROJECT RESIDENT	CONTRACTOR	PROJECT COMPLETION DATE	

FAIRFIELD ROUTE 201 BRIDGE	TITLE SHEET
-------------------------------	-------------

SHEET NUMBER	1	OF 42
--------------	---	-------

WIN 20489.00

NHPP-2048(900)

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.10	Removing Existing Superstructure Property of Contractor:Route 201 Bridge (1910 SY)	1	LS
202.12	Removing Existing Structural Concrete	1	CY
202.13	Remove Existing Railings Retained by Department	330	LF
202.202	Removing Pavement Surface	7,890	SY
202.2023	Removing Pavement Surf, Medium Cut Drum	730	SY
203.20	Common Excavation	160	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	15	CY
304.14	Aggregate Base Course - Type A	14	CY
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	199	Ton
403.208	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size	250	Ton
403.2081	Hot Mix Asphalt - 12.5 mm (Polymer Modified)	790	Ton
403.211	Hot Mix Asphalt - 9.5 mm Nominal Maximum Size (Shimming)	140	Ton
403.213	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base Course)	140	Ton
403.2131	Hot Mix Asphalt - 12.5 mm (base and intermediate course, Polymer Modified)	530	Ton
409.15	Bituminous Tack Coat, Applied	441	GAL
461.131	Temporary Pavement	390	Ton
502.21	Structural Concrete, Abutments and Retaining Walls	0.5	CY
502.26	Structural Concrete Roadway and Sidewalk Slab on Steel Bridges (450 CY)	1	LS
502.49	Structural Concrete Curbs and Sidewalks (25 CY)	1	LS
502.565	Concrete Fill	6	CY
505.08	Shear Connectors:Route 201 Bridge (7728 Each)	1	LS
508.14	High Performance Waterproofing Membrane:Route 201 Bridge (1825 SY)	1	LS
510.301	Expressway Median Crossovers	1	LS
510.302	Special Detour - Temporary Interstate Ramp	1	LS
514.06	Curing Box for Concrete Cylinders	1	EA
515.21	Protective Coating for Concrete Surfaces:Route 201 Bridge (440 SY)	1	LS
520.223	Armorless Bridge Joint (166 LF)	1	LS
520.232	Expansion Device - Asphaltic Plug Joint	215	LF
523.52	Bearing Installation	28	EA
523.5552	Pot or Disc Bearings, Expansion	28	EA
524.40	Protective Shield:Route 201 Bridge (400 SY)	1	LS
526.304	Temporary Concrete Barrier, Anchored:Route 201 Bridge (166 LF)	1	LS
526.321	Permanent Concrete Barrier Type IIIa:Route 201 Bridge (335 LF)	1	LS
527.34	Work Zone Crash Cushions	3	Unit
606.1721	Bridge Transition - Type I	4	EA
606.1724	Guardrail Transition -Type III	4	EA
606.24	Guardrail Type 3d - Single Rail	400	LF
606.65	Guardrail Thrie Beam - Single Rail	400	LF
606.73	Guardrail Thrie Beam - Single Rail Bridge Mounted	332	LF
610.08	Plain Riprap	90	CY
615.07	Loam	7	CY
618.141	Seeding Method Number 3	1.5	Unit
619.1201	Mulch, Plan Quantity	1.5	Unit
620.58	Erosion Control Geotextile	32	SY
626.33	30-inch Diameter, 8 feet or less Foundation	2	EA
629.05	Hand Labor, Straight Time	20	HR
631.10	Air Compressor (including operator)	20	HR
631.11	Air Tool (including operator)	20	HR
631.12	All Purpose Excavator (including operator)	10	HR
631.172	Truck-large (including operator)	10	HR
631.21	Road Broom (including operators and hauler)	10	HR
637.071	Dust Control:Route 201 Bridge	1	LS
639.18	Field Office, Type A	0.5	EA
645.156	Dynamic Message Sign, Maintenance and Operation	0.5	LS
645.162	Breakaway Device Multi Pole	2	EA
645.251	Roadside Guide Signs, Type I	203	SF
645.511	Flashing Warning Sign Right Chevron Signs	2	EA
652.30	Flashing Arrow	2	EA
652.312	Type III Barricades	6	EA
652.32	Battery Operated Light	2	EA
652.33	Drum	190	EA
652.341	Temporary Flexible Delineator	50	EA
652.35	Construction Signs	1,470	SF
652.361	Maintenance of Traffic Control Devices:Route 201 Bridge (200 Calendar Days)	1	LS
652.371	Portable Light Towers	2	EA
652.38	Flagger	200	HR
652.41	Portable Changeable Message Sign	3	EA
656.75	Temporary Erosion and Water Pollution Control	0.5	LS
659.10	Mobilization	0.5	LS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHP-2048(900)

WIN
20489.00
BRIDGE NO. 6620
BRIDGE PLANS

INTERSTATE 95 BRIDGE
ROUTE 201
FAIRFIELD SOMERSET COUNTY

ESTIMATED QUANTITIES

PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN-DETAILED
DESIGN-DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

BY
M. Parlin
AET
AUF
-
-
-
-
-
-

DATE
05/15
05/15
-
-
-
-
-
-

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER

2

OF 42

GENERAL NOTES

1. The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract items.

2. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.

3. Place loam 2 inches deep on all new or reconstructed side slopes or as directed by the Resident.

4. Guardrail end treatments shall be installed concurrently with the placement of each section of beam guardrail. No exposed ends are allowed.

5. Protective Coating for Concrete Surfaces shall be applied to the following areas and paid under 515.21:

 All exposed surfaces of concrete curbs,
 Fascias down to the drip notch,
 All exposed surfaces of Concrete Transition Barriers,
 Permanent barriers and curbs

6. Project info referred to below may be accessed at the following MaineDOT web address: http://www.maine.gov/contractors/*projecttbl

7. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

8. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

 a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

 b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

 c. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.

9. The Contractor shall submit a Bridge Deck Removal Plan to the Resident at least 10 business days prior to the start of demolition work. The plan shall outline the methods and equipment to be used to remove and dispose of all materials included in the existing bridge deck. No work related to the removal of the bridge deck shall be undertaken by the Contractor until MaineDOT has reviewed the Bridge Deck Removal Plan for appropriateness and completeness. Payment for all work necessary for developing, submitting and finalizing the demolition Plan will be considered incidental to the bridge deck removal pay item.

10. The steel portions of the existing bridge are coated with a lead-based paint system. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the project. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. The Contractor is solely responsible for the care, custody and control of the components of the existing bridge that has been removed and any hazardous waste generated as a result of the storage, recycling or disposal of the bridge components, including lead-coated steel. The Contractor shall recycle or reuse the steel in accordance with the Maine Department of Environmental Protection's "Maine Hazardous Waste Management Regulations," Chapter 850. A copy of this regulation is available at MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment and other costs required for proper management of hazardous waste shall be considered incidental to Contract items.

11. The utilities involved in this project are as follows:
 Central Maine Power
 Fairpoint Communications
 Time Warner Cable
 Town of Fairfield Sewer
 Kennebec Water District
 Maine Department of Transportation

12. Location of utilities shown are approximate and should be verified in the field by the Contractor.

13. The Contractor shall plan and conduct the work accordingly so that upon final completion of the project there is no drop-off from the edge of shoulder pavement. All remaining or disturbed material on slopes or in ditches on the project shall be capable of attaining a growth of grass that is acceptable according to Standard Specification 618.10. No separate payment will be made for this work.

14. All waste material not used on the project shall be disposed of off the project in waste areas approved by the Resident.

15. No existing drainage shall be abandoned, removed or plugged without prior approval of the Resident.

16. Holes created by guardrail removal will be filled with ASCG, Type D and 2 inches of hot bituminous pavement as directed by the resident. Payment to be incidental to the guardrail items.

17. All existing guardrail to be removed and not required to be reset shall be removed and stacked and become the property of Maine DOT. Removal and disposal shall be incidental to the guardrail items. The Contractor shall contact Tom Roberts - 207-592-2470 a minimum of 5 working days in advance of the proposed delivery to coordinate delivery of materials. Material shall be delivered to Maine Department of Transportation, Fairfield Maintenance Lot, 10 Mountain Road, Fairfield Maine.

18. Connections for proposed guardrail to existing guardrail will be incidental to items 606.23, 606.232.

19. Unless otherwise noted Seeding Method No. 3 shall be utilized on all guardrail fill slopes.

20. No separate payment for superintendent or foreman will be made for the supervision of equipment being paid for under the equipment rental items.

21. All work shall be done in accordance with the Maine Department of Transportation's Best Management Practices for Erosion Control & Sediment Control, February 2008.

22. Any damage to the slopes caused by the Contractor's equipment, personnel, or operation shall be repaired to the satisfaction of the Resident. All work, equipment, and materials required to make repairs shall be at the Contractor's expense. Repair work, if necessary, shall not be done from a lane carrying traffic.

23. All dimensions based on or relating to the existing bridges shall be verified in the field by the Contractor.

24. The Contractor shall use care not to damage the existing reinforcing steel which is to remain. Any damaged reinforcing steel shall be replaced as directed by the Resident at no expense to the Department.

25. No separate payment will be made for drilling and anchoring of reinforcing steel, but shall be incidental to the related concrete pay item.

26. The Contractor shall locate by non-destructive methods, reinforcing steel in existing concrete before drilling and grouting new reinforcing steel and anchor rods. All costs associated with this work shall be incidental to related contract items.

27. Reinforcing steel shall have 2 inches cover unless otherwise noted.

28. Existing shear connectors shall be removed such that they project 1 inch maximum above the top of the existing top flange unless they conflict with the installation of the new shear connectors or any other work. If the existing shear connectors interfere with installation of the new shear connectors or any other work, they shall be removed completely and ground flush with the top flange. All costs associated with this work shall be incidental to related contract items.

29. Existing concrete at abutments and wingwalls to be removed as shown on the plans shall be sawcut 1 inch deep prior to removing existing concrete. All costs associated with this work shall be incidental to related contract items.

30. Where drilling and anchoring of reinforcement is specified the Contractor shall use a material listed on the Maine Department of Transportation Qualified Products List of Concrete Adhesive Anchor Systems. The depth of embedment shall be sufficient to develop 125% of the yield strength of the bar per the manufacturer's recommendations or 9 inches, whichever is greater. Proposed anchoring material and embedment depth shall be submitted for approval.

31. Aluminum bridge rail which is removed becomes the property of the State and shall be delivered to Maine DOT maintenance lot on Mountain Ave. in Fairfield. Removal, delivery, dismantling, and stacking shall be incidental to item 202.13. The Contractor shall contact Tom Roberts - 207-592-2470 a minimum of 5 working days in advance of the proposed delivery to coordinate delivery of the materials.

32. All exposed edges of concrete shall have a 3/4" chamfer unless noted otherwise.

33. Bridge drains and drain supports, including the connection to the existing girders, will not be paid directly, but will be incidental to item 502.26.

34. Converging Chevron Marking Pattern shall be made with temporary paint meeting the requirements of Section 627. Glass beads for reflectivity are required.

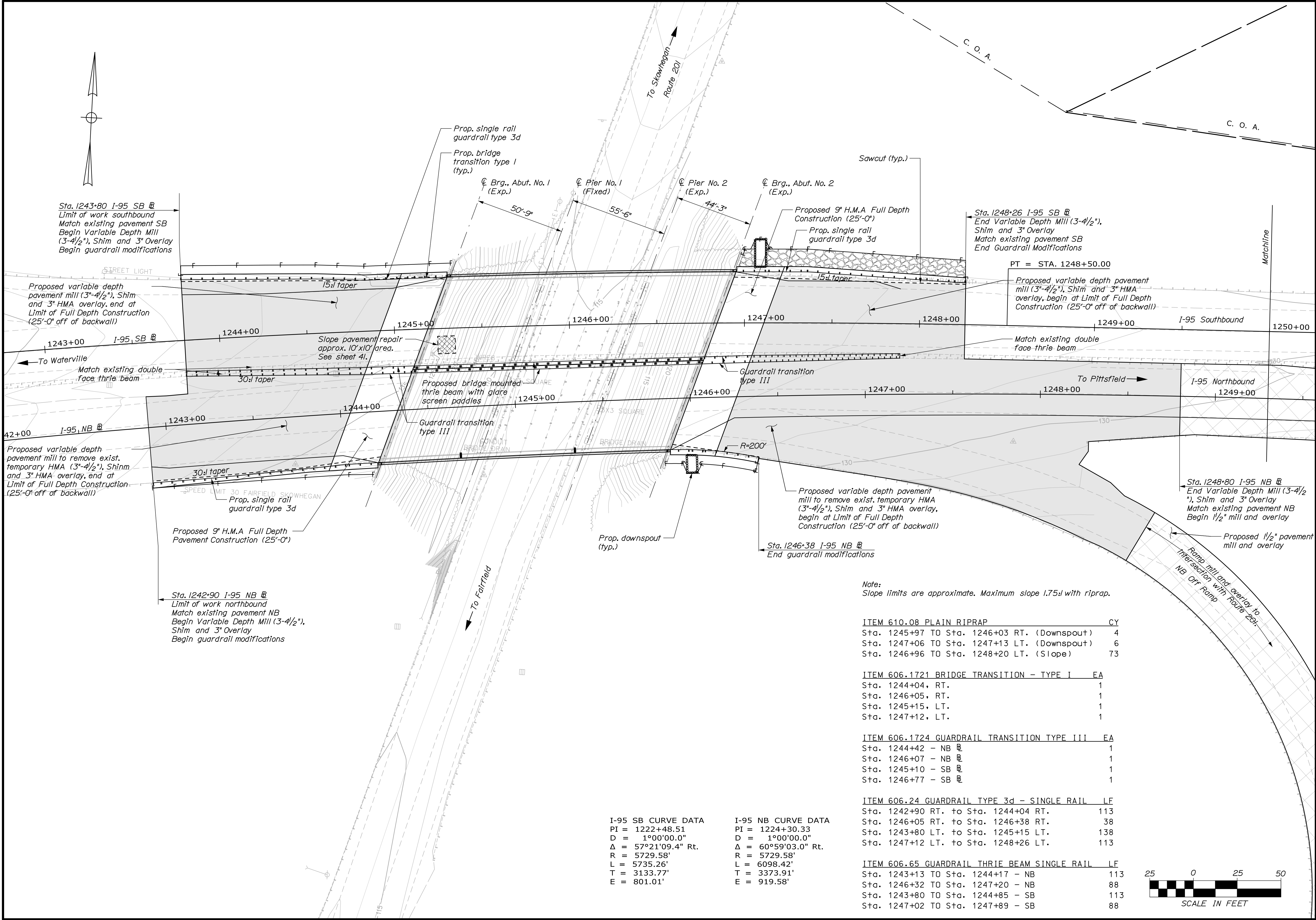
STATE OF MAINE DEPARTMENT OF TRANSPORTATION NHP-2048(900)										
	BRIDGE NO. 6620WIN20489.00BRIDGE PLANS									
INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY GENERAL NOTES	PROJ. MANAGER		M. Parlin		BY	DATE				
	DESIGN-DETAILED	ACT	CHECKED-REVIEWED	AUF	PEB	05/15 05/15	SIGNATURE			
							DESIGN-DETAILED	-	-	-
							REVISIONS 1	-	-	-
							REVISIONS 2	-	-	-
							REVISIONS 3	-	-	-
							REVISIONS 4	-	-	-
							FIELD CHANGES	-	-	-
SHEET NUMBER										
3										
OF 42										

Date:6/18/2015

Username:

Division:

Filename: 004_HDP\an01.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NHP-2048(900)

BRIDGE NO. 6620
WIN
20489.00
BRIDGE PLANS

PROJ. MANAGER	M. Parlin	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	LZD	MPC	05/15			
CHECKED-REVIEWED	DAM		05/15			
DESIGN-DETAILED						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

INTERSTATE 95 BRIDGE
ROUTE 201
FAIRFIELD
SOMERSET COUNTY

GENERAL PLAN 1

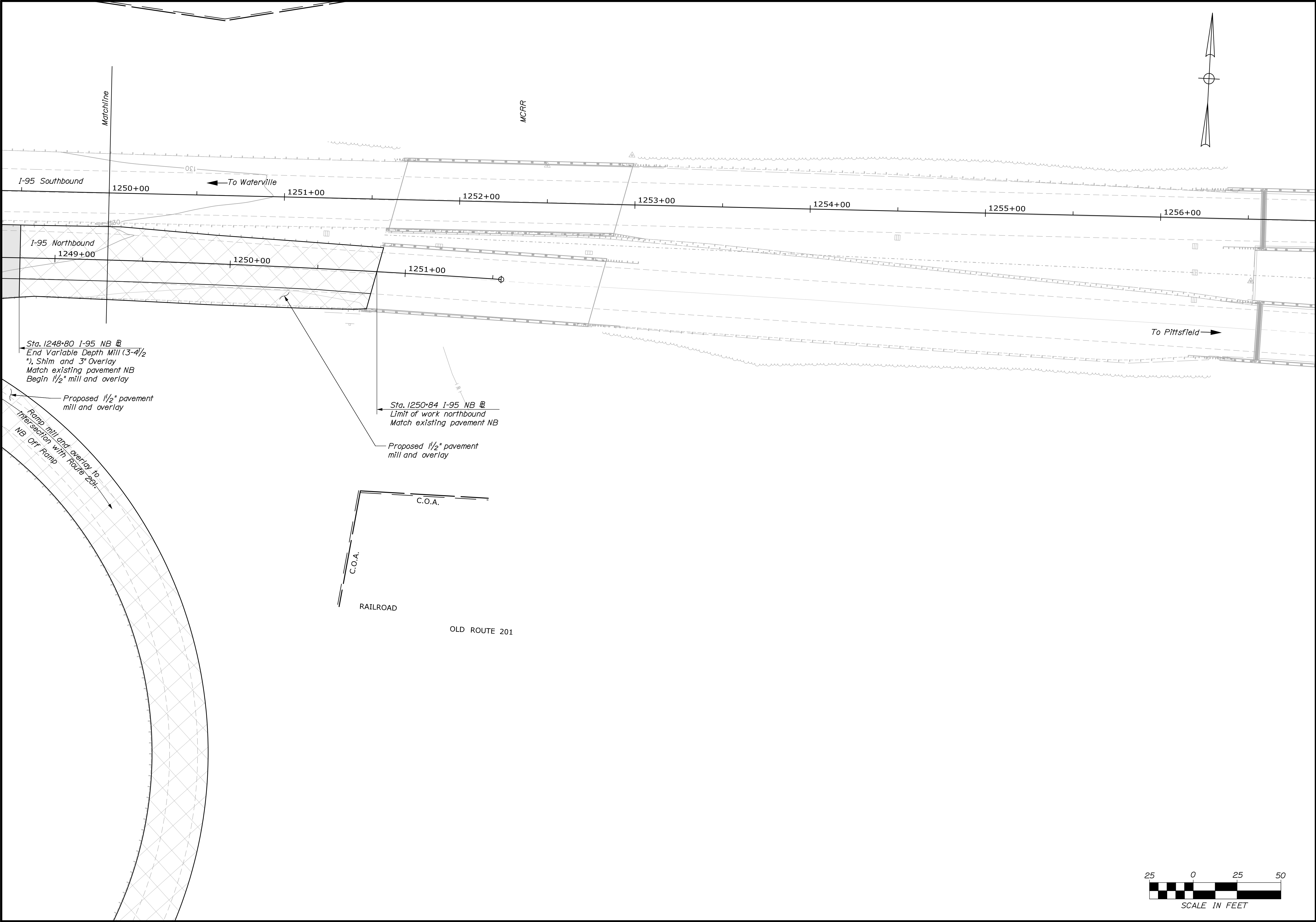
SHEET NUMBER
4
OF 42

Date:6/18/2015

Username:

Division:

Filename: 005_HDPJan02.dgn



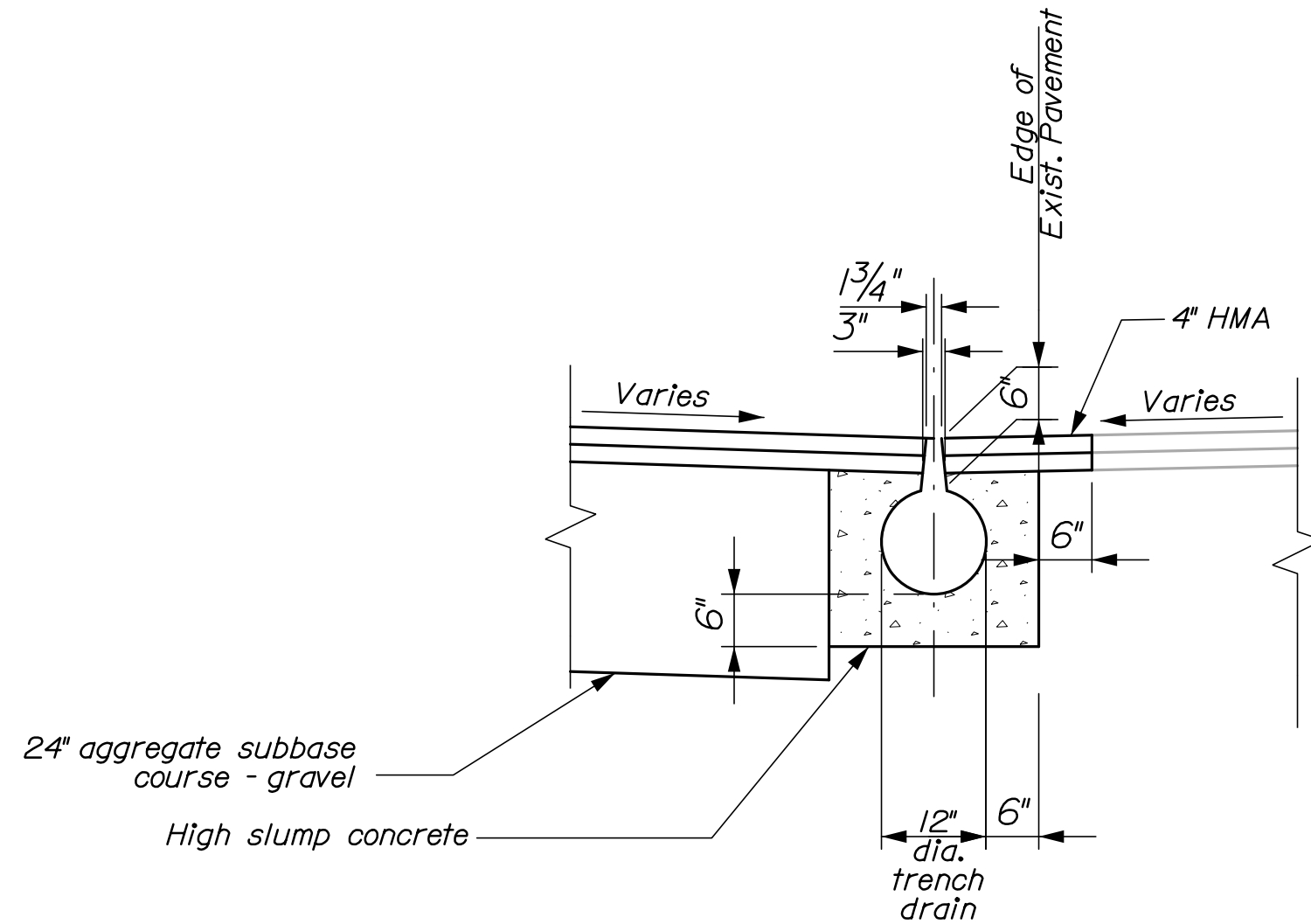
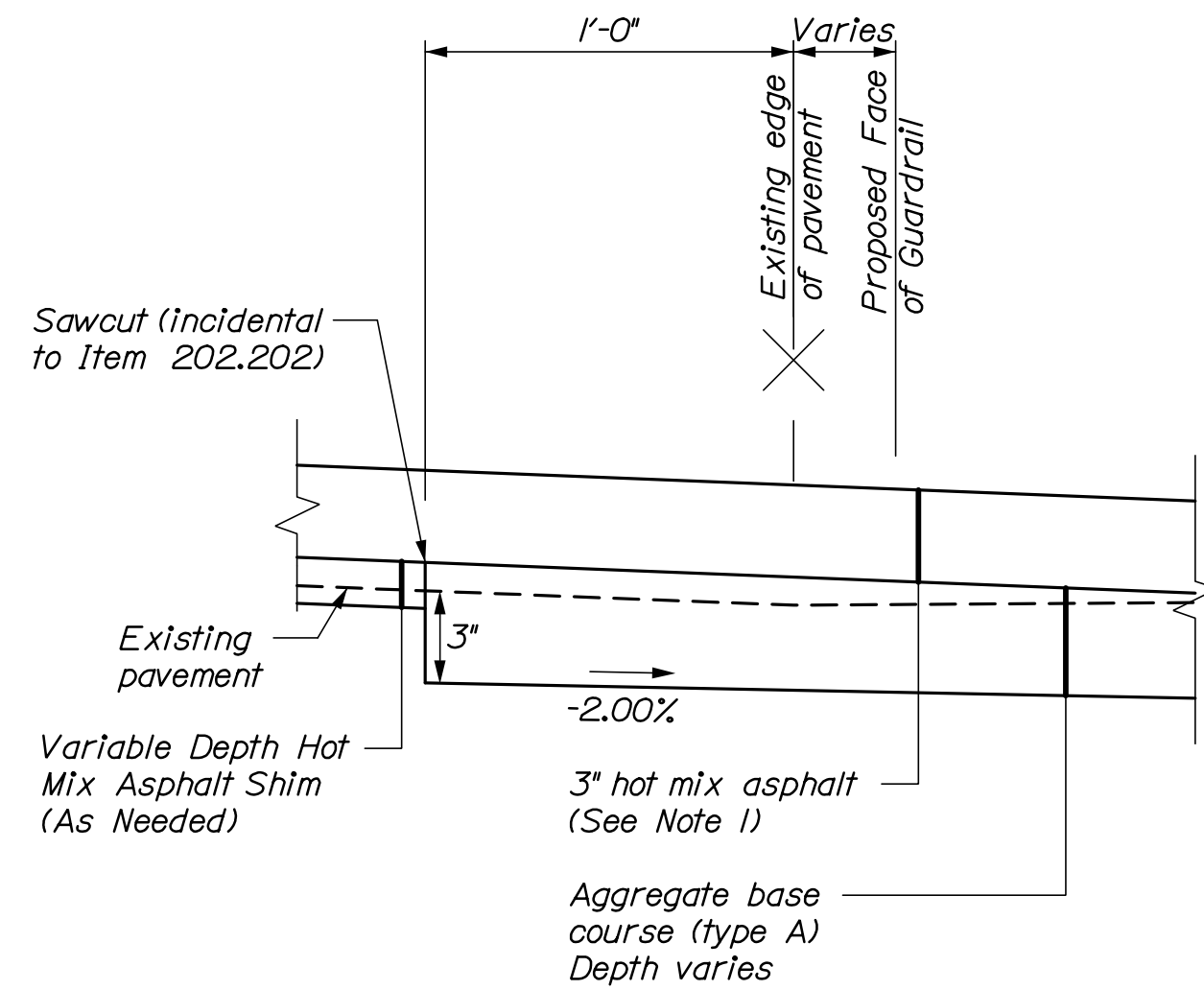
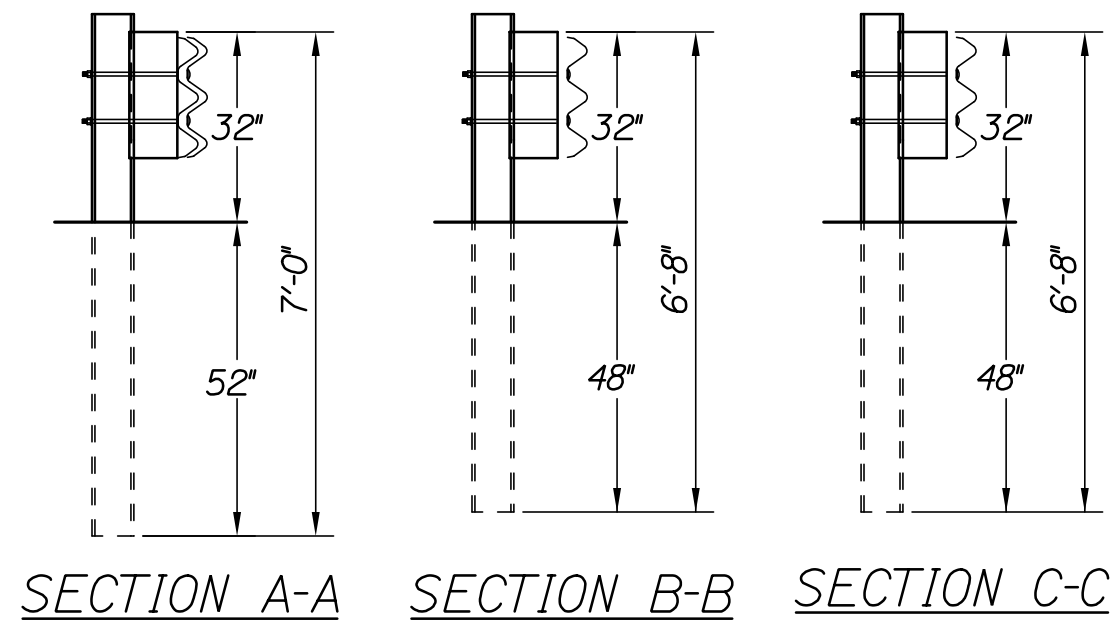
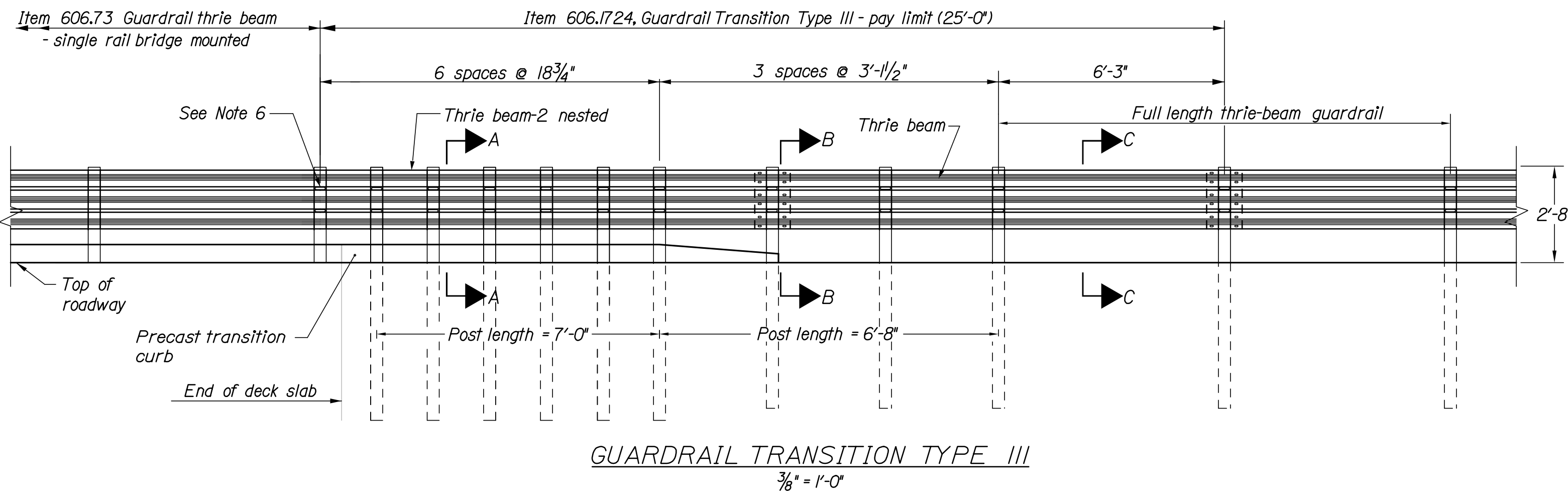
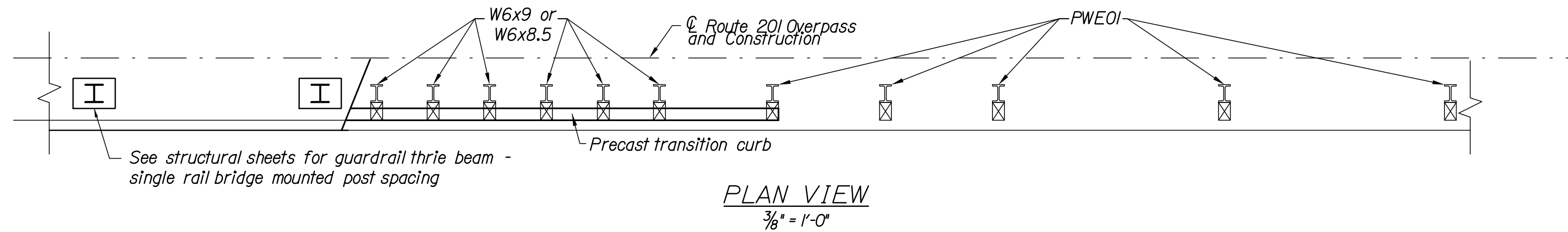
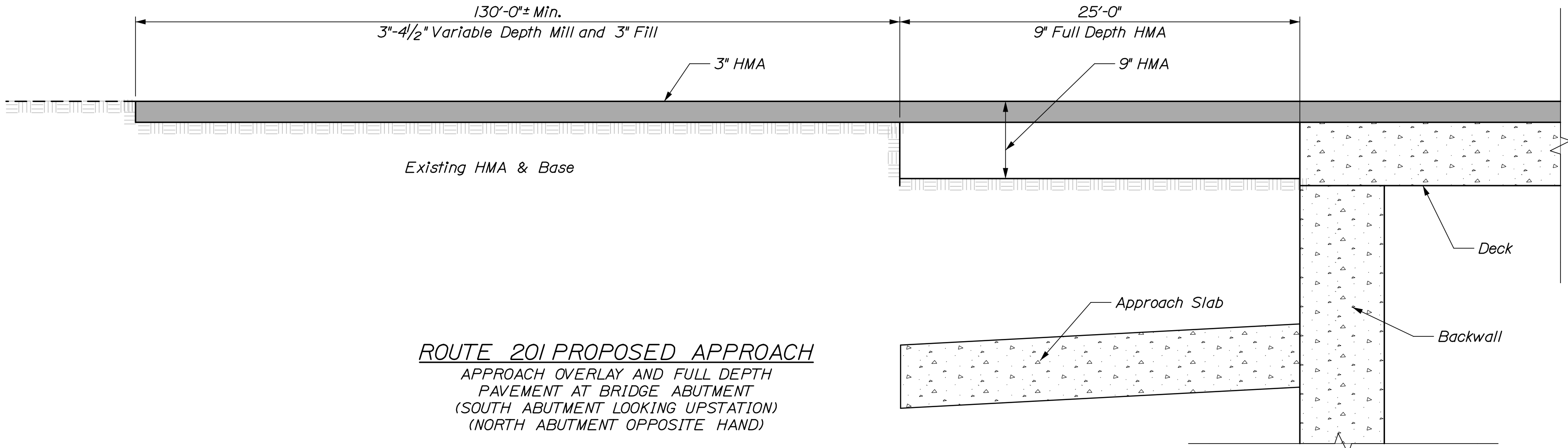
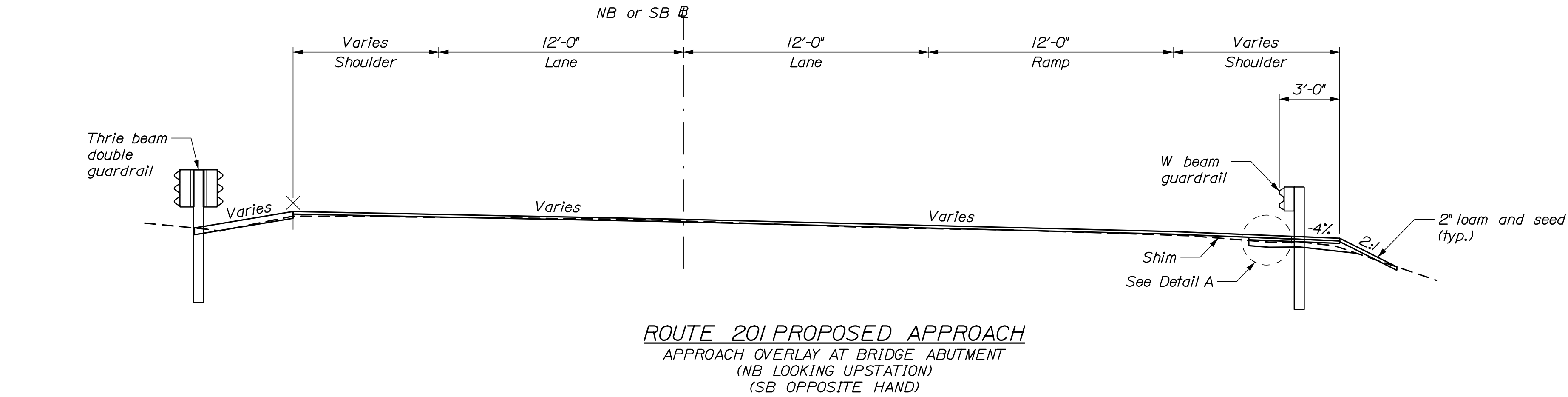
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
FAIRFIELD		SOMERSET COUNTY	
INTERSTATE 95 BRIDGE		ROUTE 201	
GENERAL PLAN 2		SHEET NUMBER	
5		OF 42	
NHP-2048(900)		BRIDGE NO. 6820	
WIN		20489.00	
BRIDGE PLANS			

Date:6/18/2015

Username:

Division:

Filename: 006_Rt201Typ.dgn



GUARDRAIL TRANSITION NOTES:

1. Additional holes may be made in the thrie-beam panels by drilling, punching, or other means that produce a neat, clean hole. Burning holes will not be allowed.
2. Thrie beam shall be placed with the composite blackout face in front of or directly above the curb face.
3. Rail element shall meet all requirements of AASHTO M-180 except as modified on the plans. The thrie beam transition to w-beam shall be of the same material, but shall not be less than 10 gauge.
4. After installation is complete, upset the thread on the anchor bolts in three places around each bolt, at the junction of the nut and the exposed thread, with a center punch or similar tool.
5. Standard barrier hardware has been used to develop these guardrail attachments. Designations provided in parenthesis relate to standard elements detailed in "A Guide to Standardized Barrier Rail Hardware." 1979. AASHTO-AGC-ARTBA Joint Cooperative Committee.
6. Thrie beam bridge attachment shall have 3" x 7/8" slots at the first bolt connections on the bridge deck. The threads on the bolts at the slots shall be upset at the junction of the nut with a center punch or similar tool.

So
to

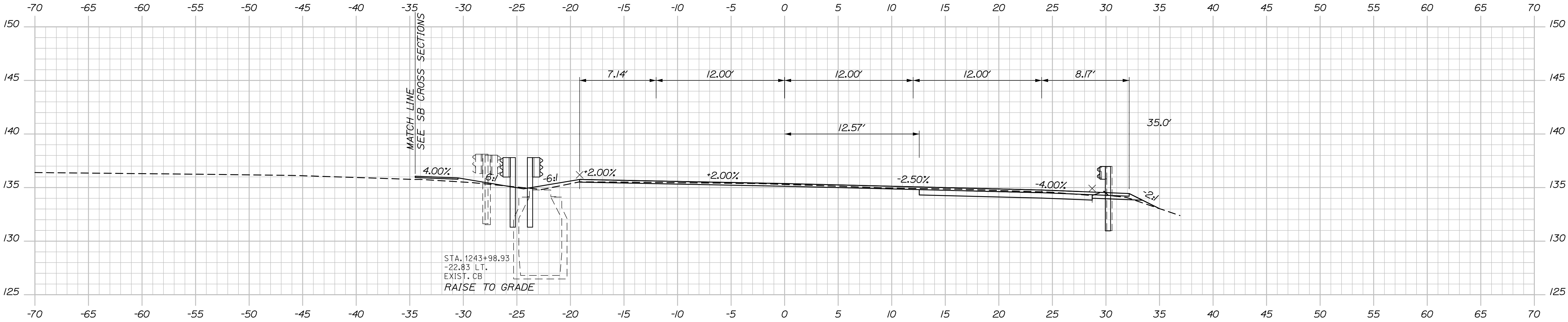
STATE OF MAINE DEPARTMENT OF TRANSPORTATION	NHP-2048(900)		BRIDGE NO. 6620		WIN 20489.00		BRIDGE PLANS	
	INTERSTATE 95 BRIDGE		ROUTE 201		SOMERSET COUNTY		TYPICAL SECTIONS AND SPECIAL DETAILS	
	FAIRFIELD		SHEET NUMBER		6		OF 42	

Date:6/18/2015

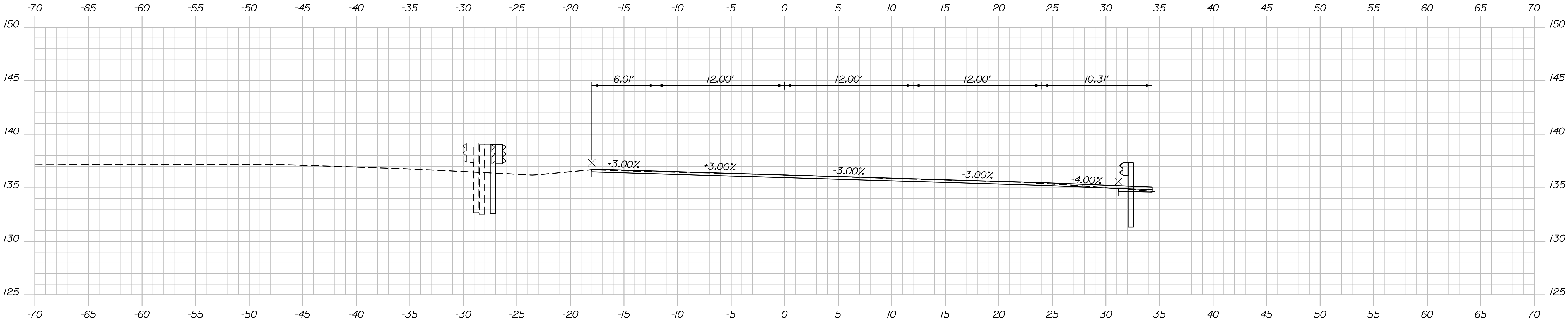
Username:

Division:

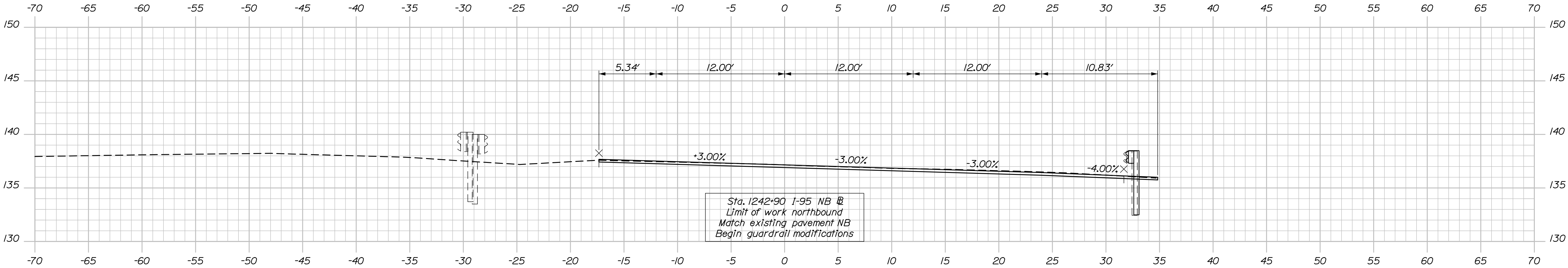
Filename: xssect.dgn



1244+00.00



1243+50.00



1243+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2048(900)

BRIDGE NO. 6620
WIN
20489.00

BRIDGE PLANS

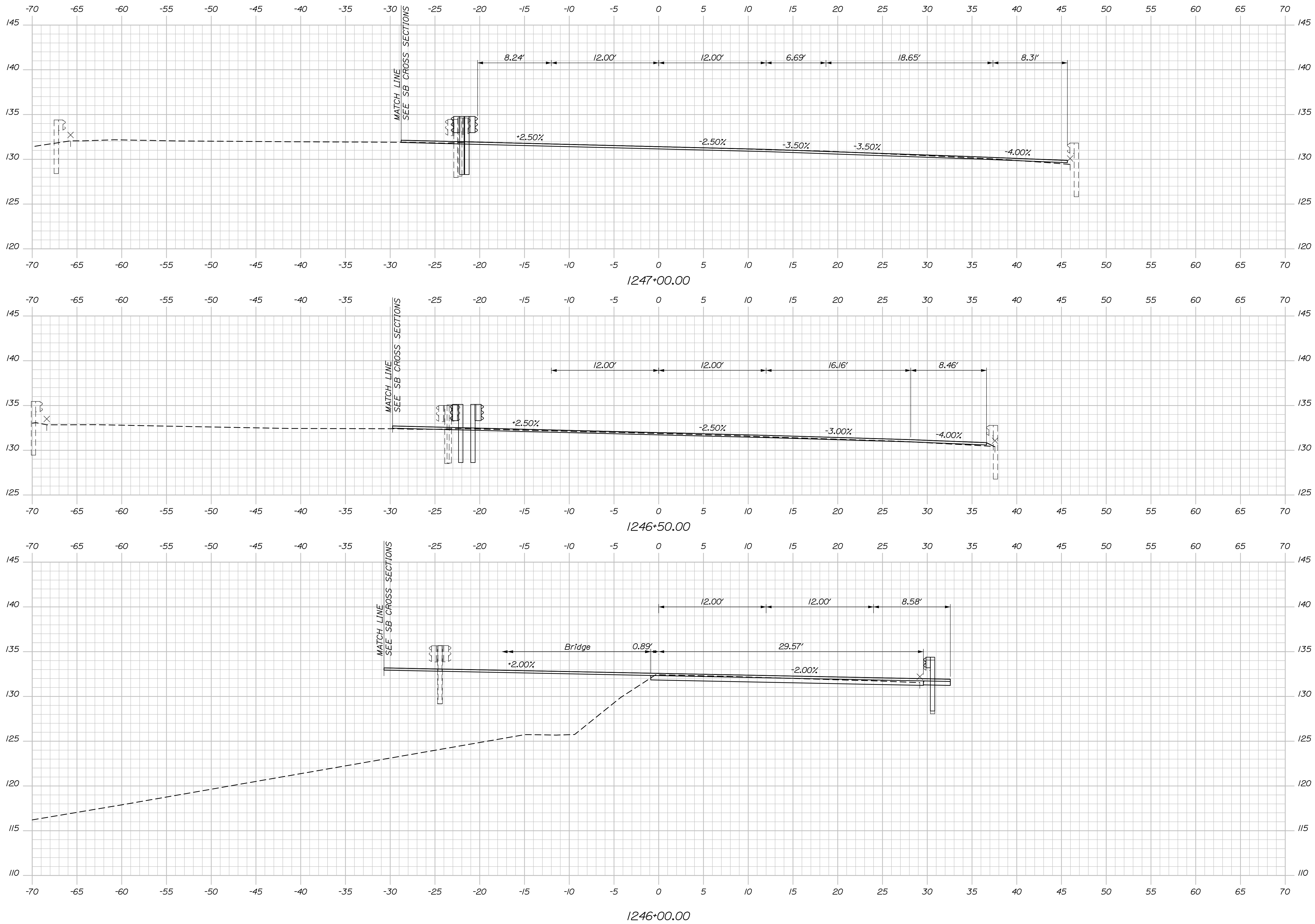
PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	L7D	MPC	05/15
CHECKED-REVIEWED	DAM	-	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

INTERSTATE 95 BRIDGE
ROUTE 201
FAIRFIELD
SOMERSET COUNTY

CROSS SECTIONS

SHEET NUMBER
2
OF 42

Filename: xsect.dgn



STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
NHPP-2048(900)	
BRIDGE NO. 5820	WIN 20489.00
BRIDGE PLANS	

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	LZD	MPC	05/15
CHECKED-REVIEWED	DAM	-	05/15
DESIGNS-DET AL E02	-	-	SIGNATURE
DESIGNS-DET AL E03	-	-	
DESIGNS-DET AL E04	-	-	
REVISIONS 1	-	-	P.E. NUMBER
REVISIONS 2	-	-	
REVISIONS 3	-	-	
REVISIONS 4	-	-	
FIELD CHANGES	-	-	DATE

INTERSTATE 95 BRIDGE
 ROUTE 201
 FAIRFIELD SOMERSET COUNTY
 CROSS SECTIONS

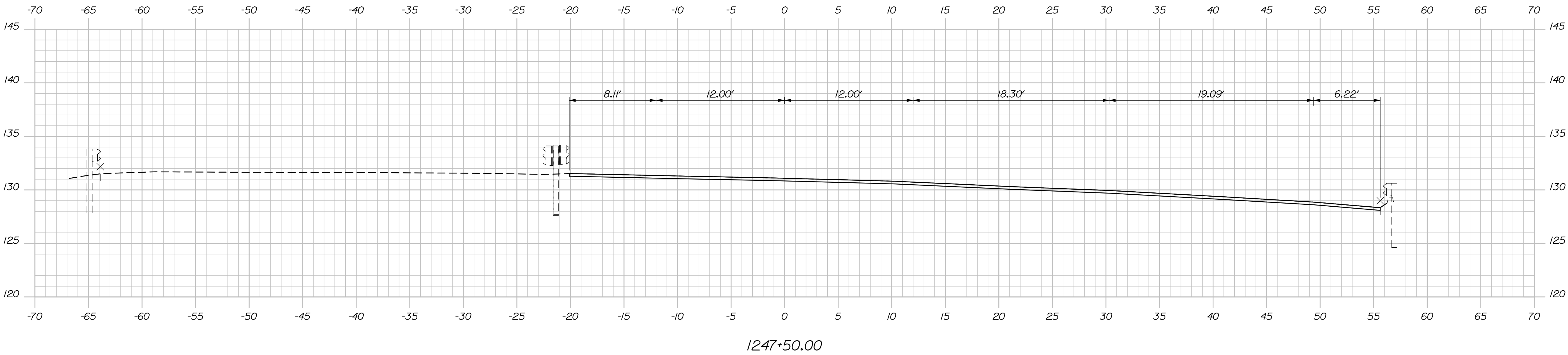
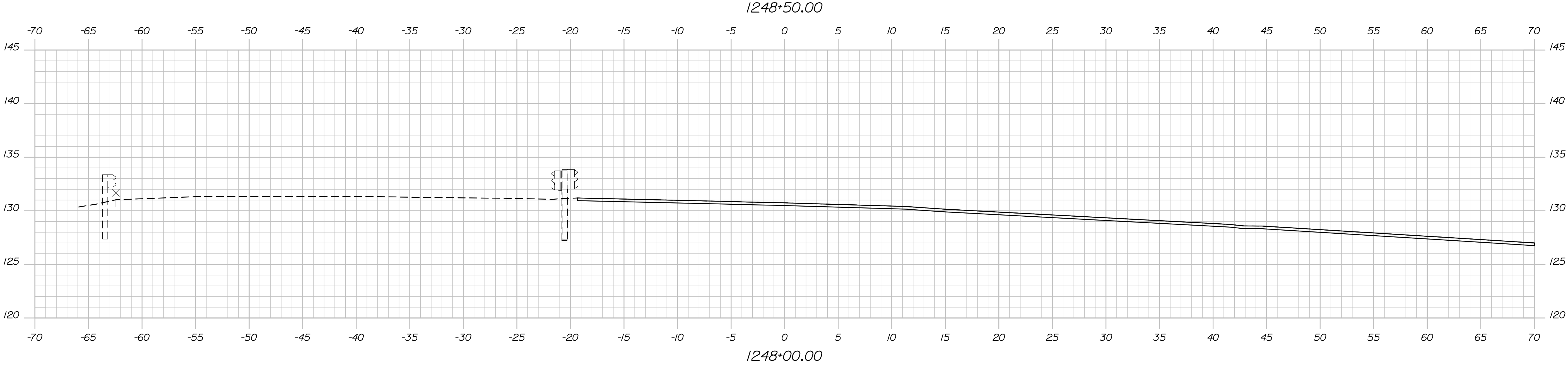
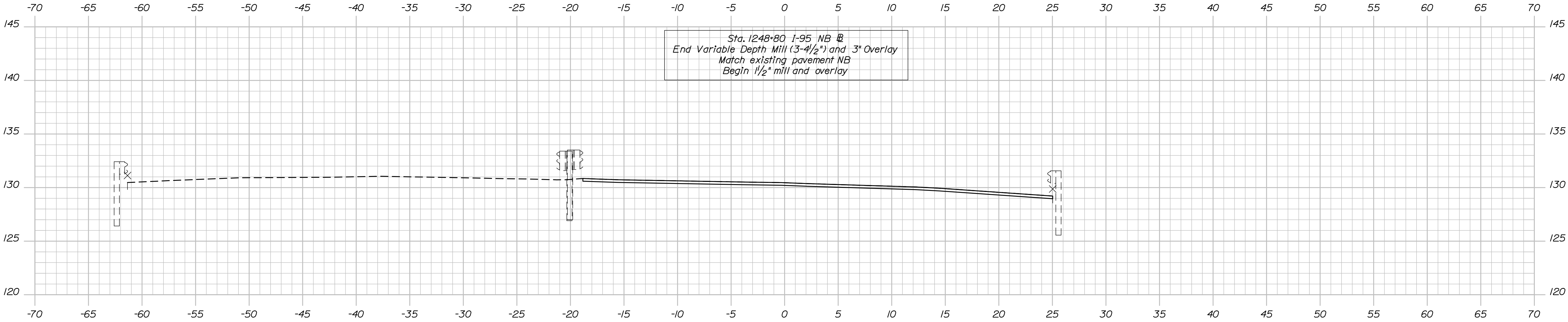
SHEET NUMBER
8
OF 42

Date:6/18/2015

Username:

Division:

Filename: xsect.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2048(900)

WIN
20489.00

BRIDGE NO. 6620
BRIDGE PLANS

PROJ. MANAGER	M. Parlin	BY	DATE
CHECKED-REVIEWED	L70	MPC	05/15
DESIGN-REVIEWED	DAM	-	05/15
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

INTERSTATE 95 BRIDGE
ROUTE 201
FAIRFIELD SOMERSET COUNTY

CROSS SECTIONS

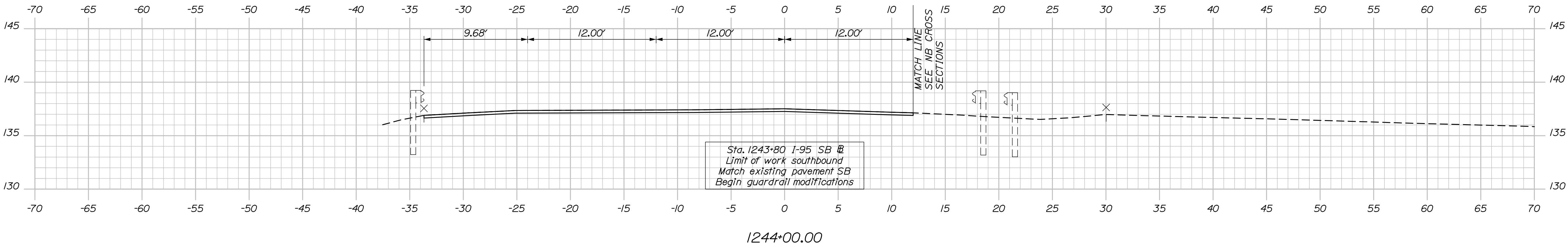
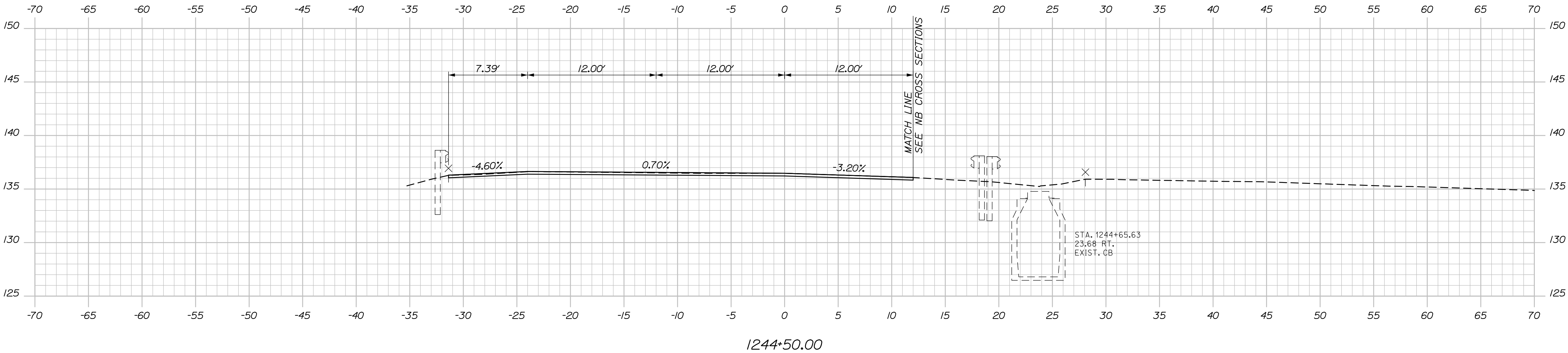
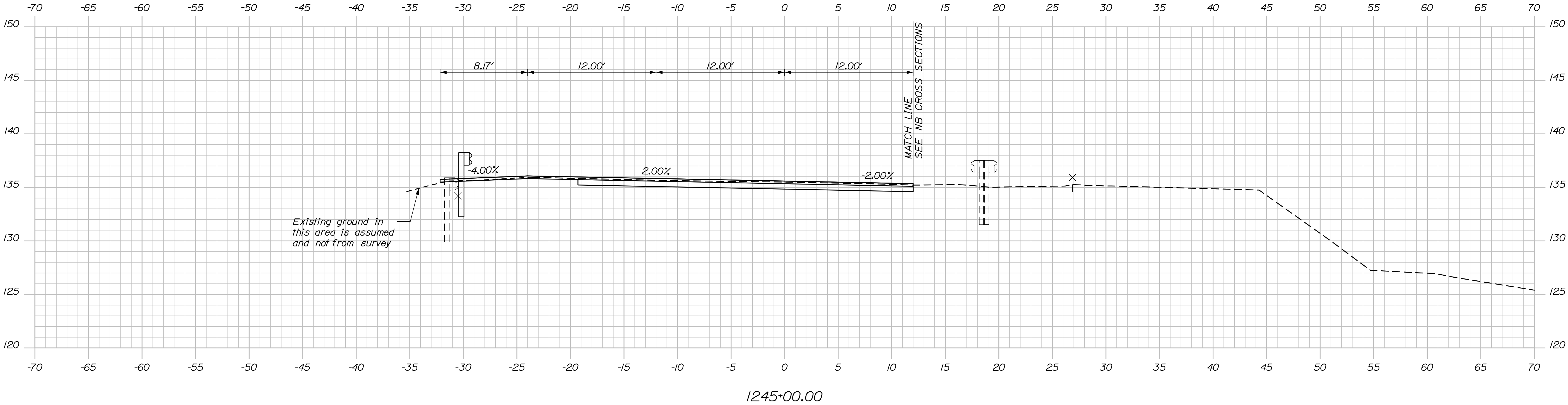
SHEET NUMBER
9
OF 42

Date:6/18/2015

Username:

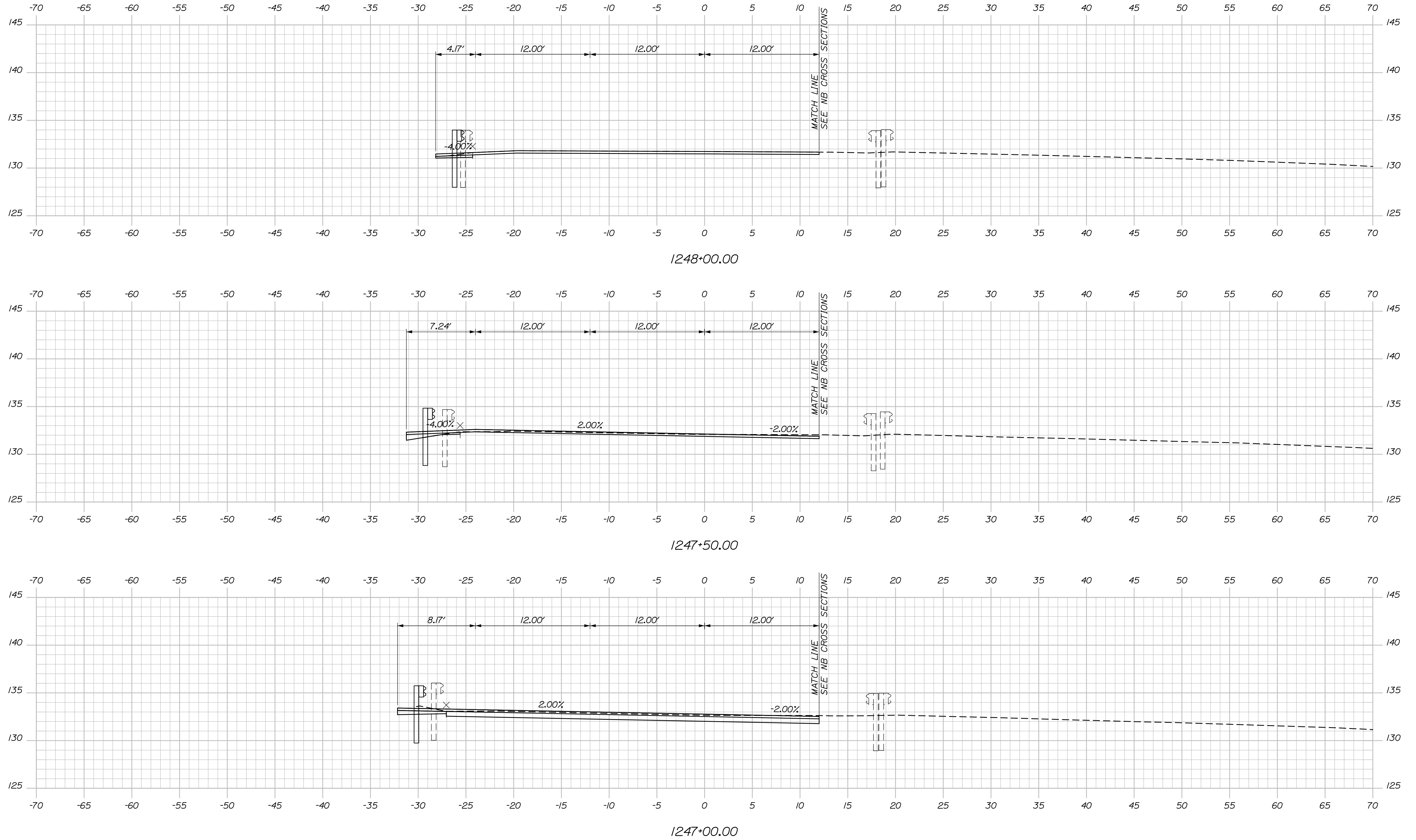
Division:

Filename: xsect.dgn



STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		NHP-2048(900)		WIN		BRIDGE NO. 6820		20489.00		BRIDGE PLANS	
INTERSTATE 95 BRIDGE		ROUTE 201		SOMERSET COUNTY		FAIRFIELD		CROSS SECTIONS		SHEET NUMBER		10	
DATE		BY		SIGNATURE		P.E. NUMBER		DATE		FIELD CHANGES		OF 42	
05/15		MPC		-		-		-		-		-	
05/15		L70		-		-		-		-		-	
DESIGN-DETAILED		CHECKED-REVIEWED		DESIGN-DETAILED		REVISIONS 1		REVISIONS 2		REVISIONS 3		REVISIONS 4	
-		-		-		-		-		-		-	
-		-		-		-		-		-		-	
-		-		-		-		-		-		-	
-		-		-		-		-		-		-	
-		-		-		-		-		-		-	

Filename: xsect.dgn



Sta. 1248+20 I-95 SB @
End guardrail modifications

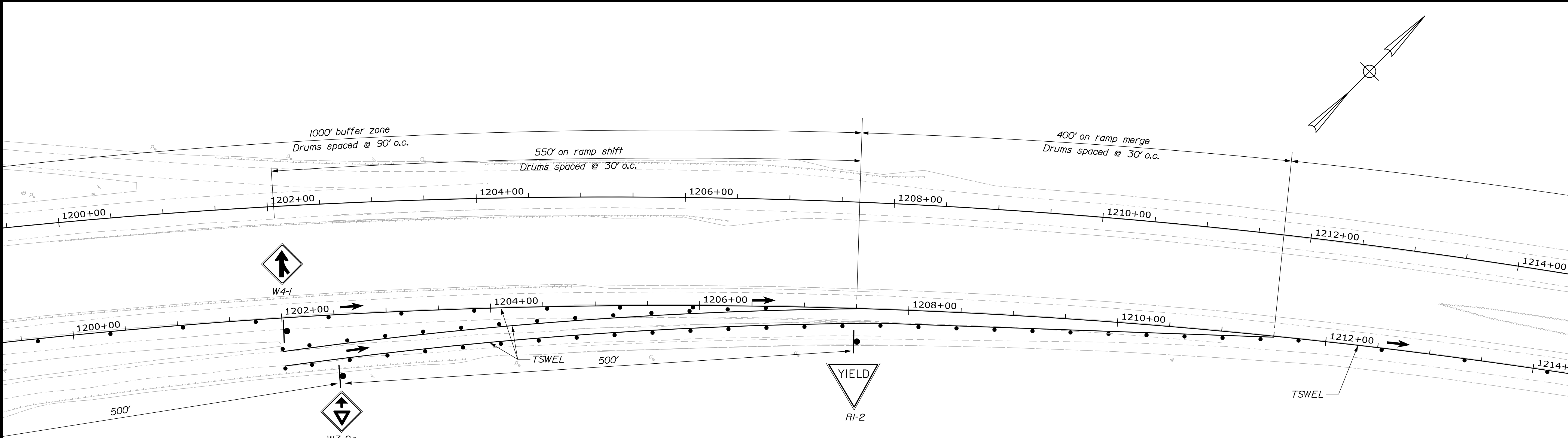
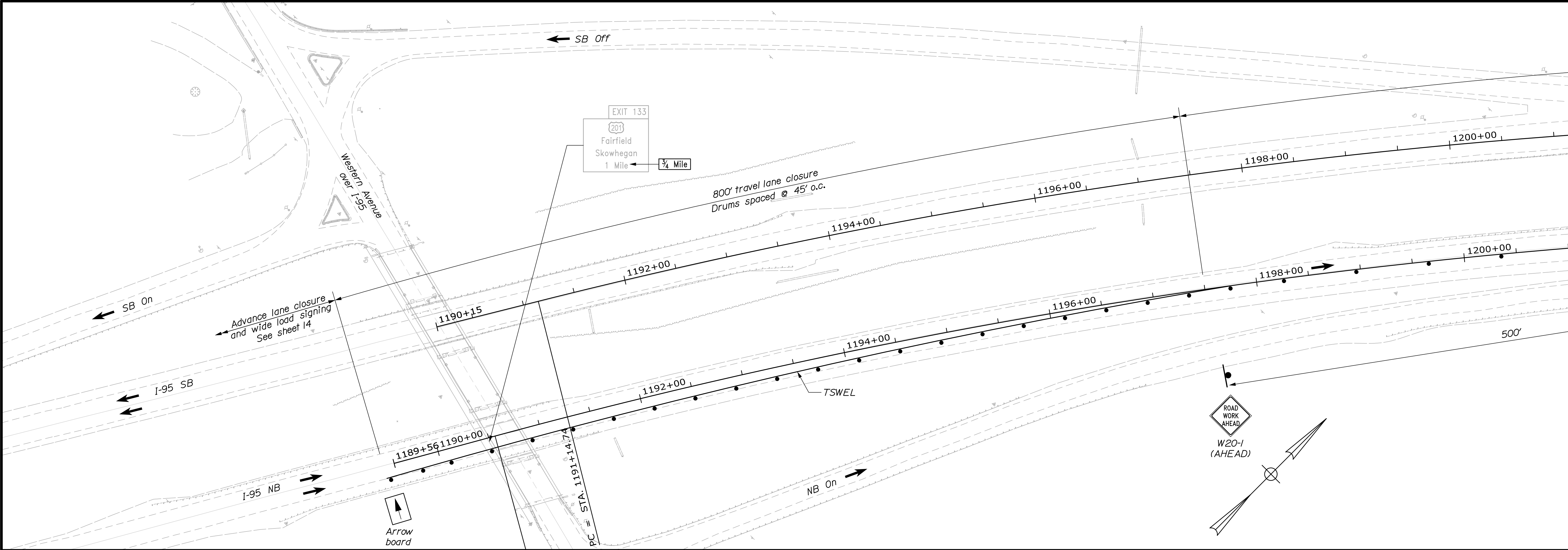
11 OF 42	SHEET NUMBER	INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY				PROJ. MANAGER	M. Perlin	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION NHPP-2048(900) BRIDGE NO. 5820 WIN 20489.00 BRIDGE PLANS			
		CROSS SECTIONS				DESIGN-DETAILED	LZD	MPC	05/15				
	CHECKED-REVISED					DAM	-	05/15	SIGNATURE				
	DESIGN2-DETAILED2					-	-	-	P.E. NUMBER				
	DESIGN3-DETAILED3					-	-	-					
	REVISIONS 1					-	-	-					
	REVISIONS 2					-	-	-					
	REVISIONS 3					-	-	-					
	REVISIONS 4					-	-	-	DATE				
	FIELD CHANGES				-	-	-	-					

Date:6/18/2015

Username:

Division:

Filename: 012_201-MOTPhase1-01.dgn



- NOTES:
- Limits of temporary pavement markings, removal of pavement markings and temporary concrete barrier for Item 510.302 Special Detour - Temporary Interstate Ramp are shown between Stations 1224+50 and 1237+00 right side of the NB baseline. All other pavement markings, removal of pavement markings and temporary concrete barrier shall be included in Item 510.301 Expressway Median Crossover.
 - All conflicting pavement markings shall be removed.
 - Rumble strips within limits of shifted travel lanes shall be removed.

LEGEND

TSWEL = Temporary 6" Solid White Edge Line

TSWLL = Temporary 6" Solid White Lane Line

TSYEL = Temporary 6" Solid Yellow Edge Line

TSYLL = Temporary 6" Solid Yellow Lane Line

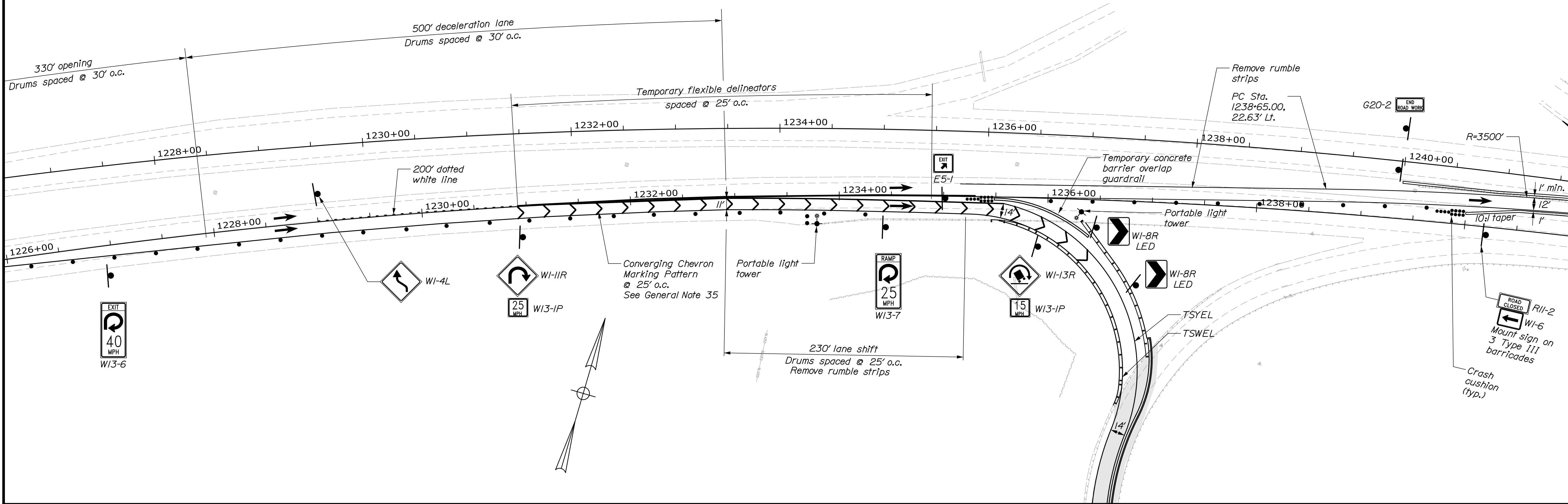
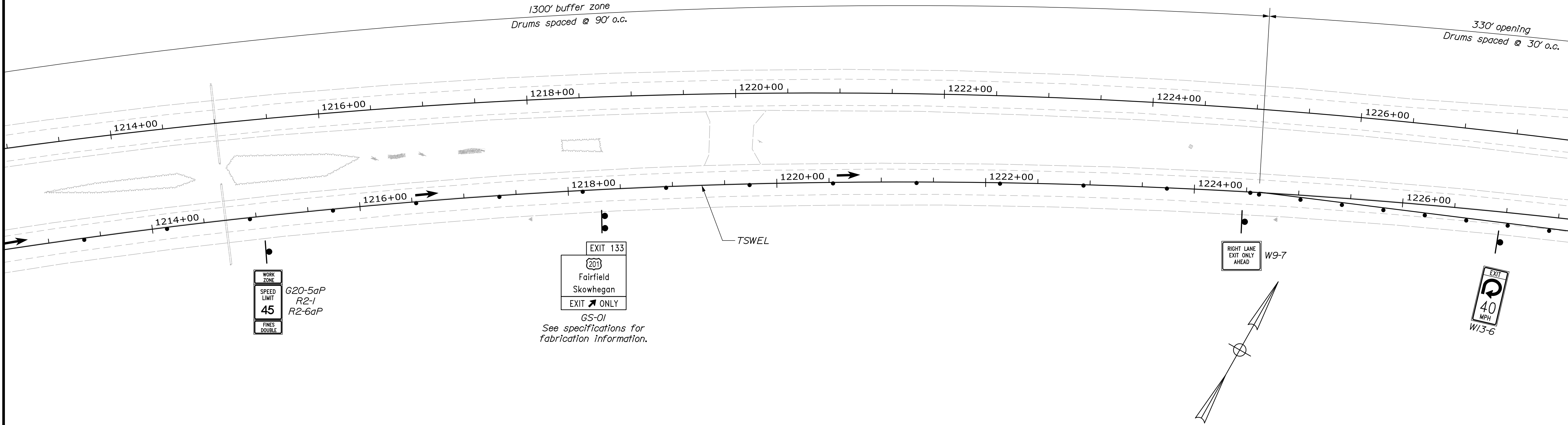
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
NHP-2048(900)		WIN	
BRIDGE NO. 5620		20489.00	
BRIDGE PLANS			
INTERSTATE 95 BRIDGE		SHEET NUMBER	
ROUTE 201		12	
FAIRFIELD		OF 42	
SOMERSET COUNTY			
MAINTENANCE OF TRAFFIC			
PHASE 1			
PROJ. MANAGER		DATE	
DESIGNED-DETAILED		BY	
CHECKED-REVIEWED		M. Parlin	
DESIGNED-DETAILED		MPC	
DESIGNED-DETAILED		05/15	
REVISIONS 1		SIGNATURE	
REVISIONS 2		P.E. NUMBER	
REVISIONS 3		DATE	
REVISIONS 4			
FIELD CHANGES			

Date:6/18/2015

Username:

Division:

Filename: 013_201-M0TPhase1-02.dgn



STATE OF MAINE DEPARTMENT OF TRANSPORTATION NHPP-2048(900)	SIGNATURE		DATE
	P.E. NUMBER		DATE
	DATE		DATE
BRIDGE NO. 5620		WIN	20489.00
BRIDGE PLANS			

PROJ. MANAGER	M. Parlin	BY	MPC	DATE	05/15
CHECKED-REVIEWED	LZD	DATE	05/15		
DESIGNED-DETAILED	-		-		
DESIGNED-DETAILED	-		-		
REVISIONS 1	-		-		
REVISIONS 2	-		-		
REVISIONS 3	-		-		
REVISIONS 4	-		-		
FIELD CHANGES	-		-		

INTERSTATE 95 BRIDGE
ROUTE 201
SOMERSET COUNTY
FAIRFIELD
MAINTENANCE OF TRAFFIC
PHASE 1

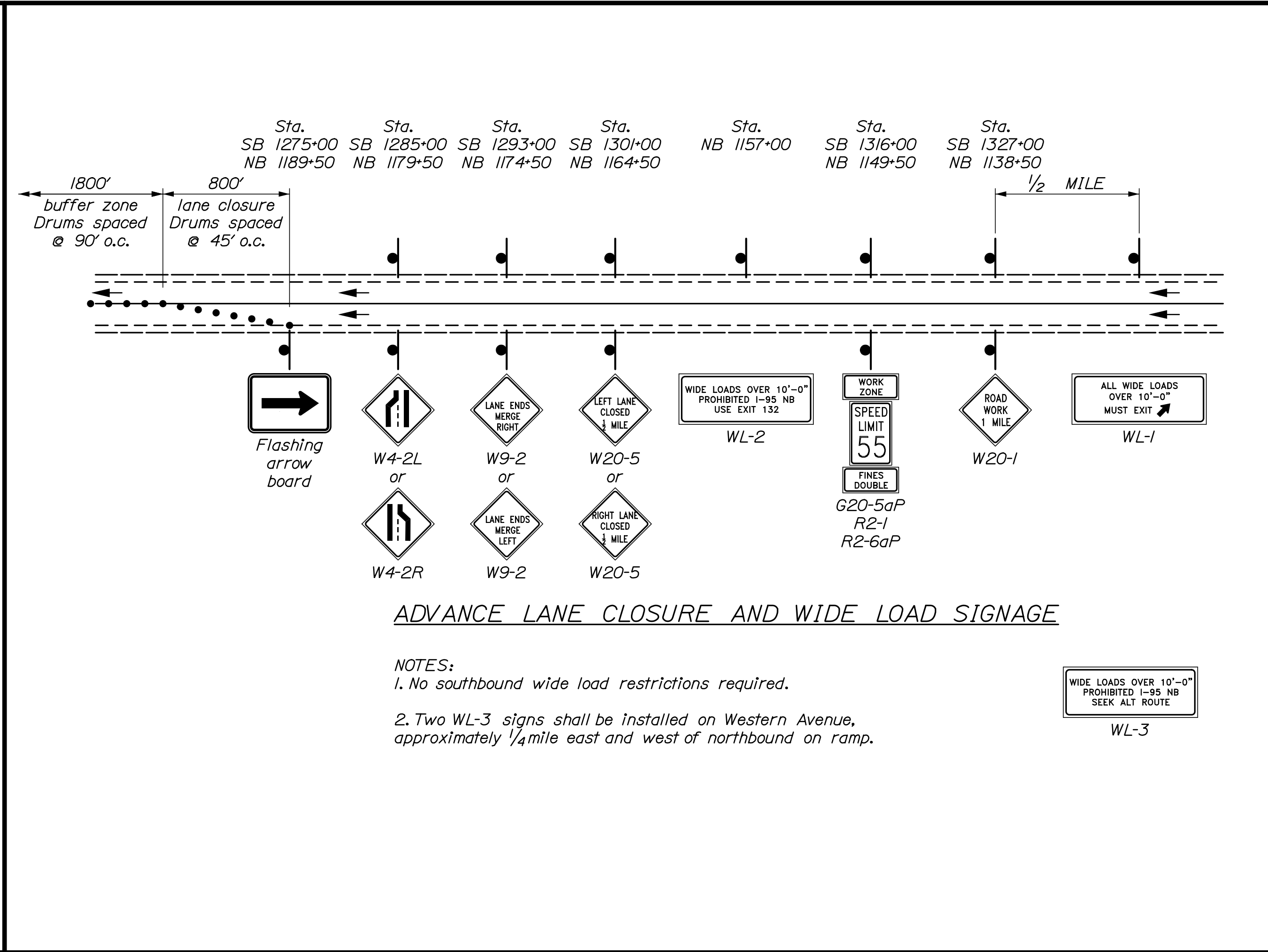
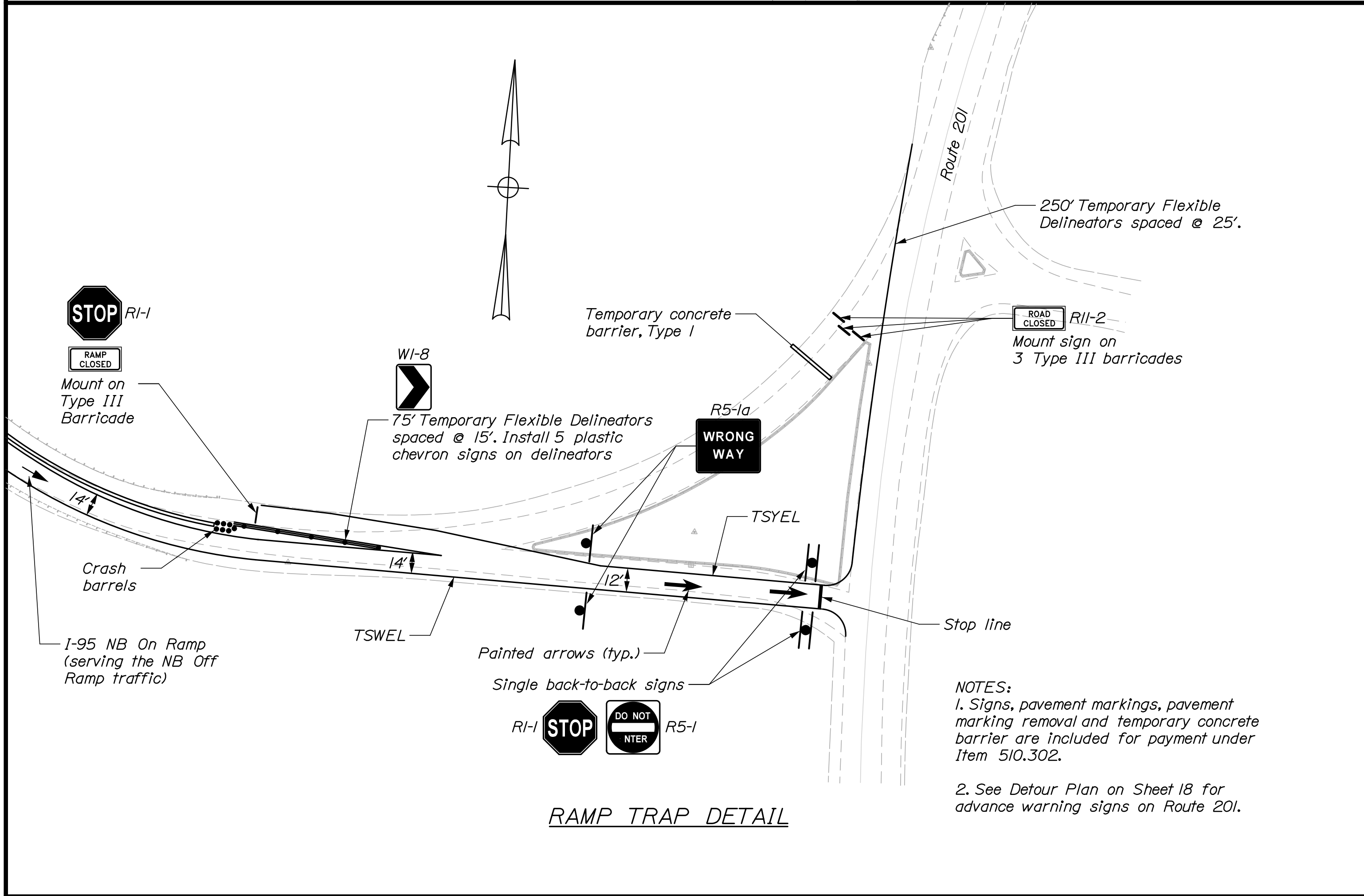
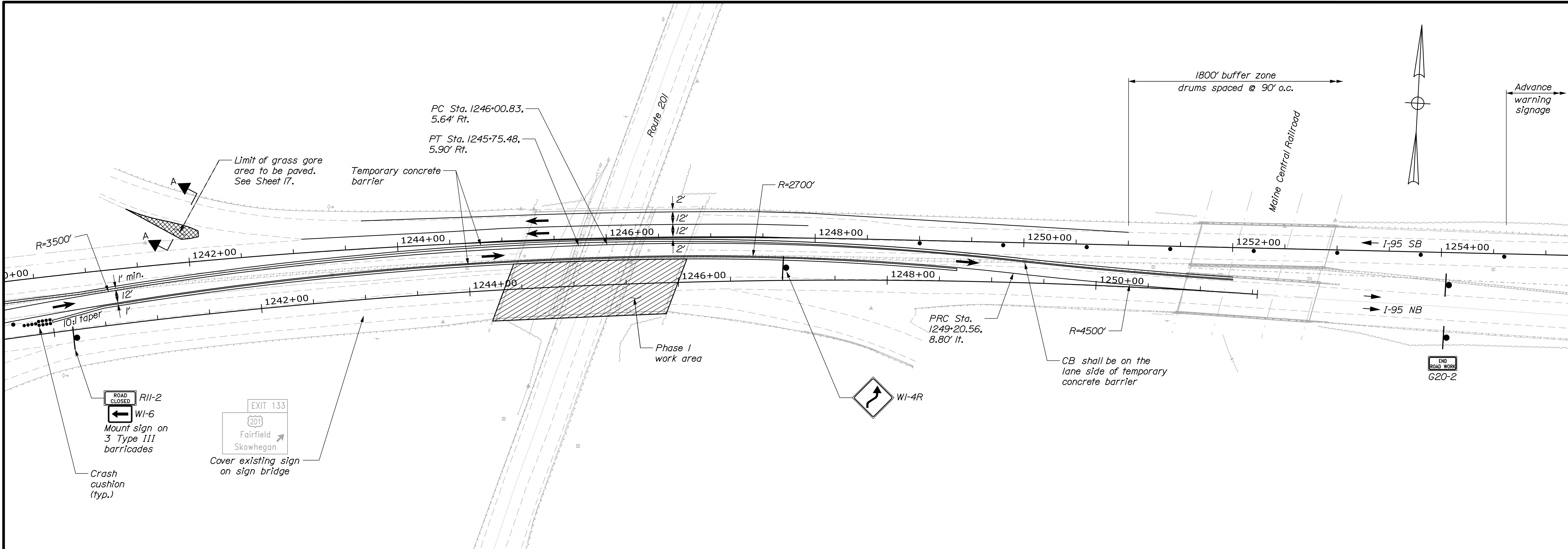
SHEET NUMBER
13
OF 42

Date:6/19/2015

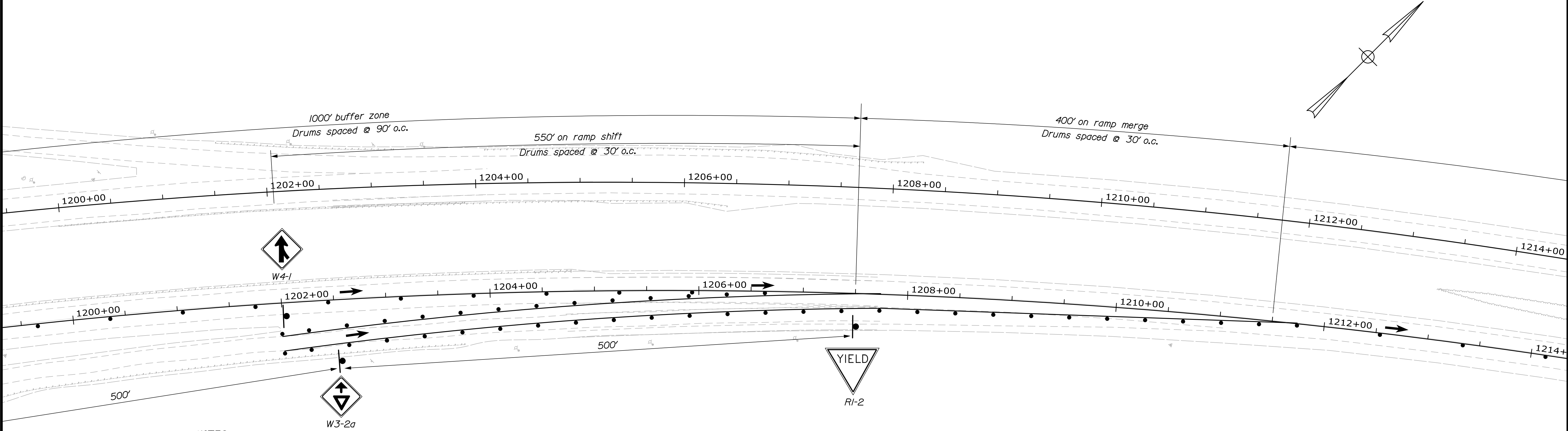
Username:

Division:

Filename: 014_201-MOTPhase1-03.dgn

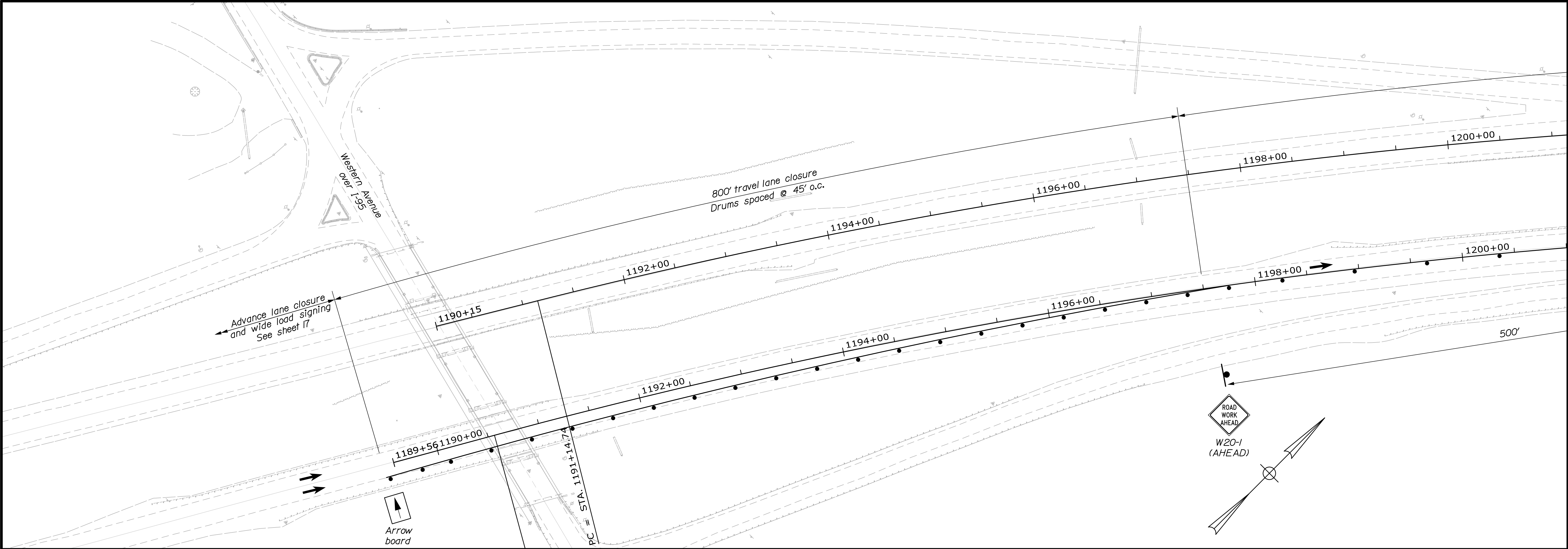


STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		NHP-2048(900)		BRIDGE NO. 6620		WIN 20489.00		BRIDGE PLANS	
INTERSTATE 95 BRIDGE		ROUTE 201		SOMERSET COUNTY		FAIRFIELD		MAINTENANCE OF TRAFFIC		PHASE 1	
PROJ. MANAGER		BY		DATE		SIGNATURE		P.E. NUMBER		DATE	
DESIGNED-DETAILED		MPC		05/15							
CHECKED-REVIEWED				05/15							
DESIGNED-DETAILED											
DESIGNED-DETAILED											
REVISIONS 1											
REVISIONS 2											
REVISIONS 3											
REVISIONS 4											
FIELD CHANGES											
SHEET NUMBER		14		OF 42							



NOTES:
1. Limits of temporary pavement markings, removal of pavement markings and temporary concrete barrier for Item 510.302 Special Detour - Temporary Interstate Ramp are shown between Stations 1224+50 and 1237+00 right side of the NB baseline. All other pavement markings, removal of pavement markings and temporary concrete barrier shall be included in Item 510.301 Expressway Median Crossover.
2. All conflicting pavement markings shall be removed.
3. Rumble strips within limits of shifted travel lanes shall be removed.

LEGEND
TSWEL = Temporary 6" Solid White Edge Line
TSWLL = Temporary 6" Solid White Lane Line
TSYEL = Temporary 6" Solid Yellow Edge Line
TSYLL = Temporary 6" Solid Yellow Lane Line



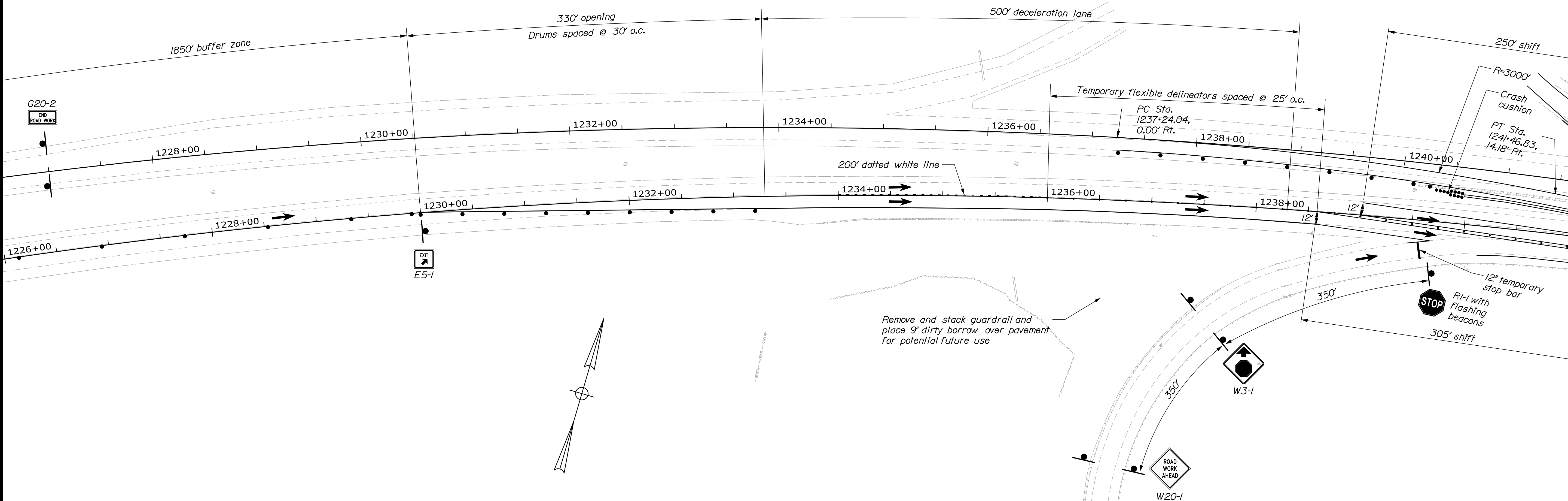
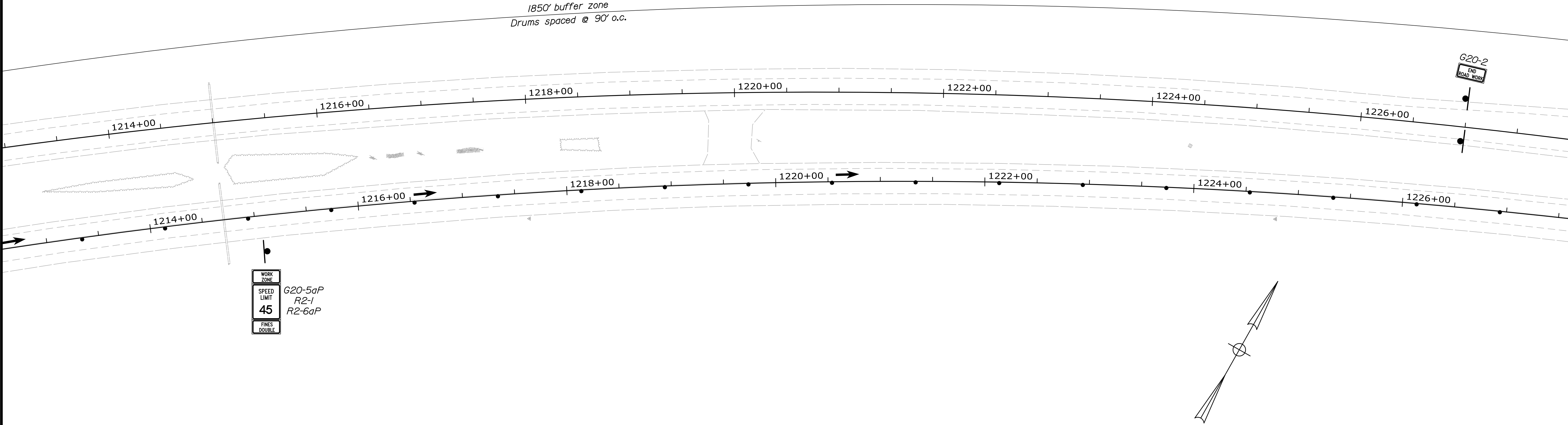
STATE OF MAINE		DATE		BY		M. Parlin	
DEPARTMENT OF TRANSPORTATION		05/15		MPC		05/15	
NHP-2048(900)		SIGNATURE		P.E. NUMBER		DATE	
BRIDGE NO. 5620		WIN		20489.00		BRIDGE PLANS	
INTERSTATE 95 BRIDGE		SOMERSET COUNTY		FAIRFIELD		SHEET NUMBER	
ROUTE 201		MAINTENANCE OF TRAFFIC		PHASE 2		15	
						OF 42	

Date:6/18/2015

Username:

Division:

Filename: 016_201-M0TPhase2-02.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NHPP-2048(900)
BRIDGE NO. 6620
WIN 20489.00
BRIDGE PLANS

PROJ. MANAGER	BY	DATE	SIGNATURE
DESIGN-DETAILED	MPC	05/15	
CHECKED-REVIEWED	-	05/15	
DESIGN-DETAILED	-	-	
DESIGN-DETAILED	-	-	
REVISIONS 1	-	-	
REVISIONS 2	-	-	
REVISIONS 3	-	-	
REVISIONS 4	-	-	
FIELD CHANGES	-	-	

INTERSTATE 95 BRIDGE	SOMERSET COUNTY
ROUTE 201	
FAIRFIELD	
MAINTENANCE OF TRAFFIC	
PHASE 2	

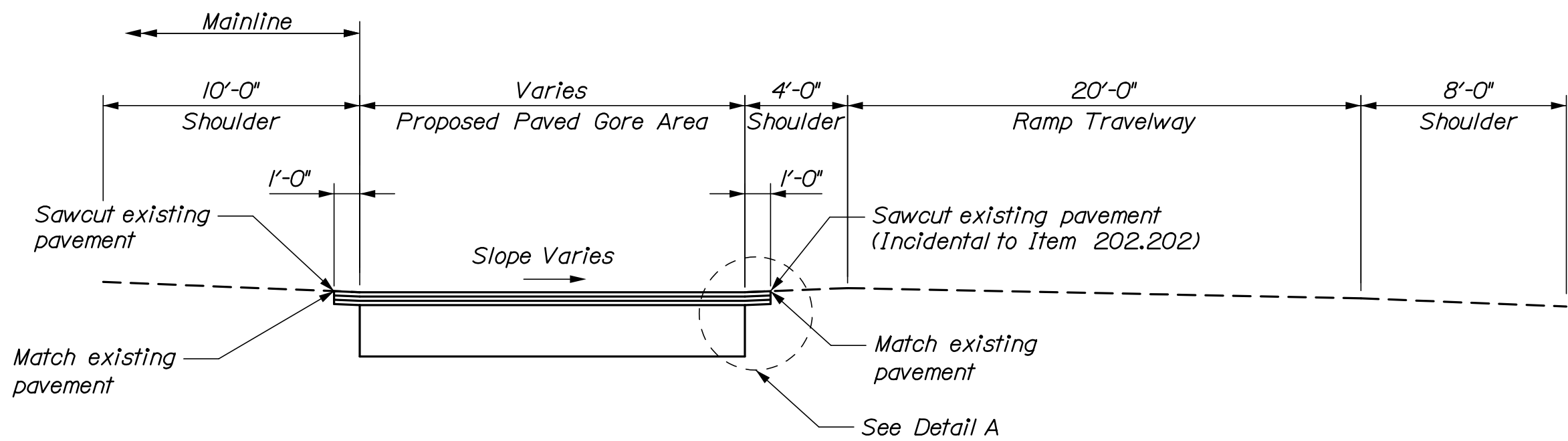
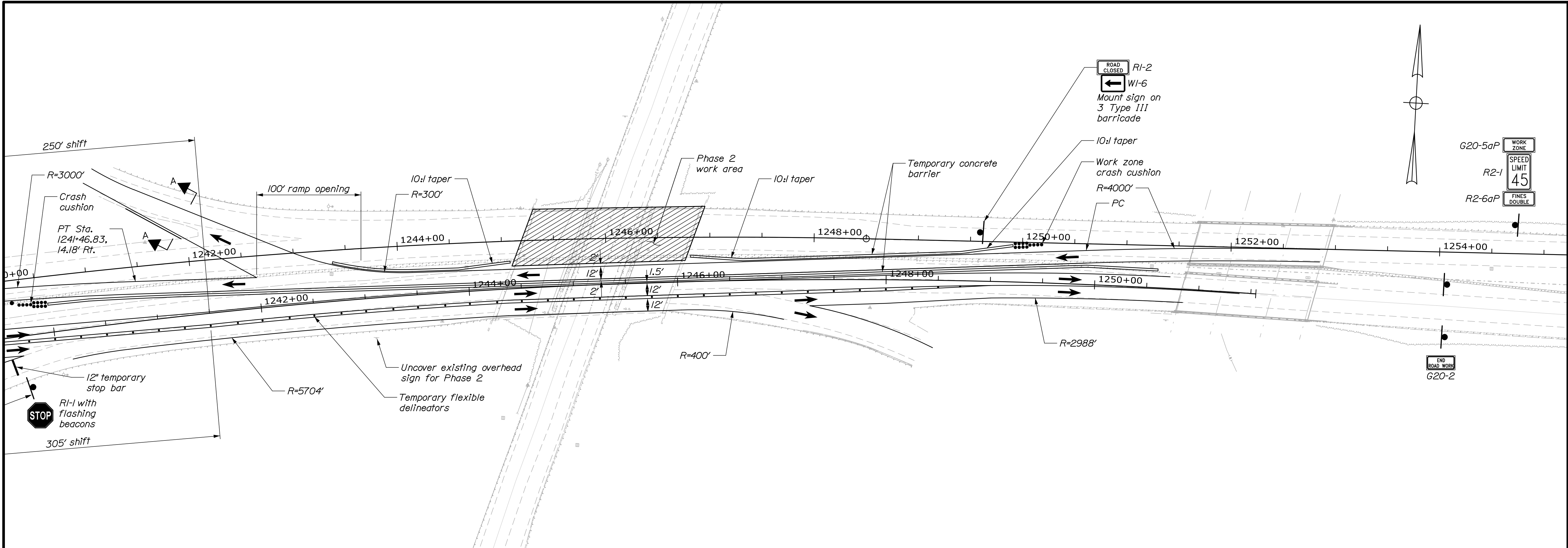
SHEET NUMBER
16
OF 42

Date:6/18/2015

Username:

Division:

Filename: 017_201-MOTPhase2-03.dgn



SECTION A-A

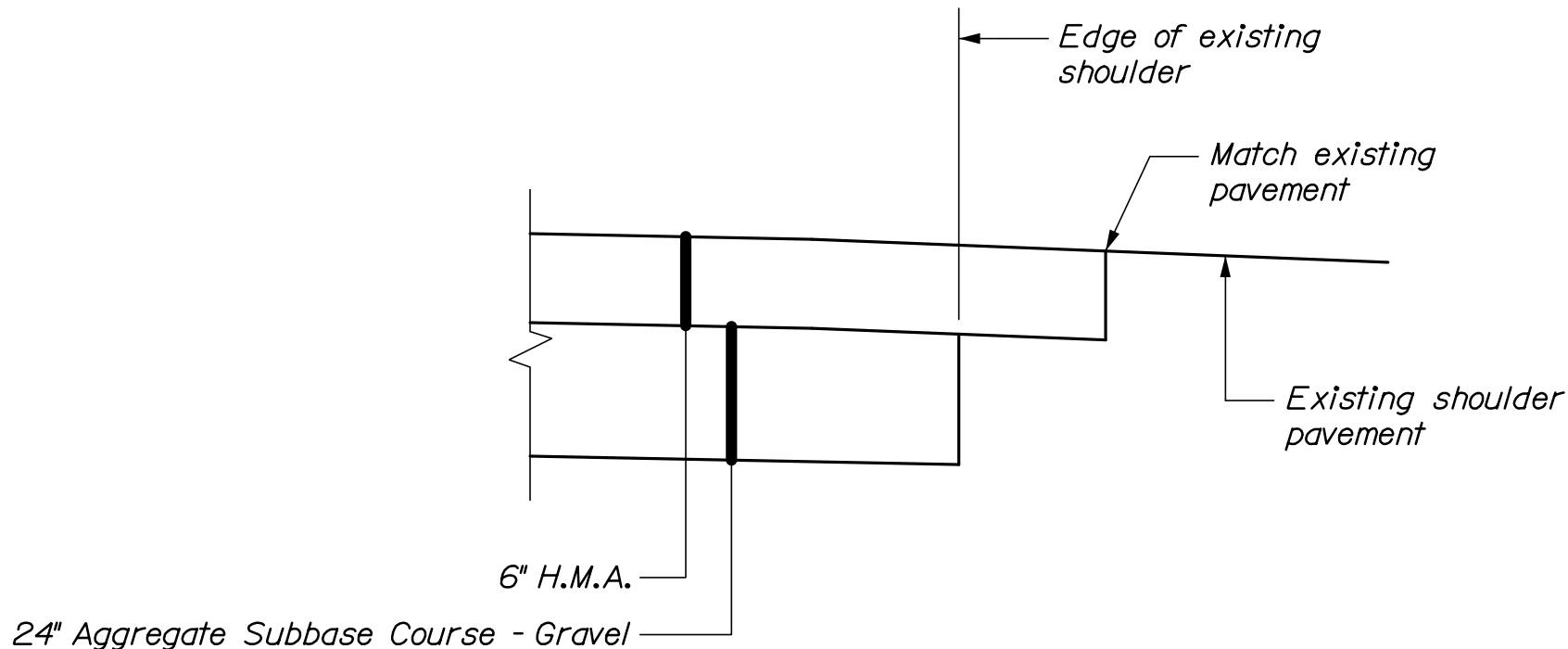
GORE PAVING DETAILS
INTERSTATE 295 NORTHBOUND OVER 8239E (SR703)
N.T.S.

NOTES:

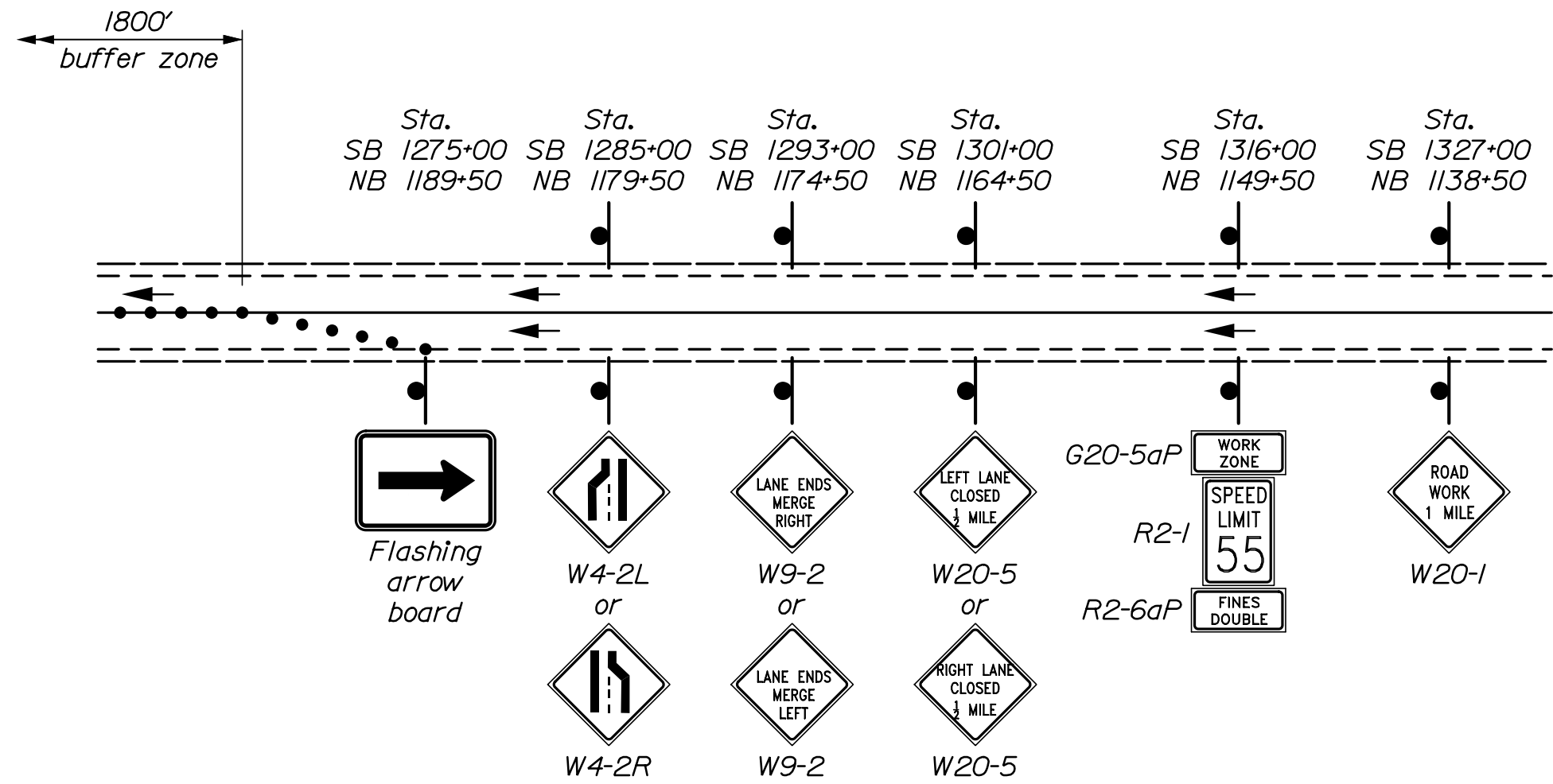
1. Payment for all labor, materials and equipment necessary to complete all gore prep work and paving work shall be paid for under item 510.301, Expressway Median Crossovers. See Special Provision 510.

2. Removal of the gore paving upon completion of the project is not required. Contractor shall final stripe the roadway to reflect existing conditions.

3. A maximum grade change of 6% between existing shoulder cross slopes and proposed paved gore cross slopes are required. Adjust gore cross slopes as necessary. Coordinate work with Resident.



DETAIL A
N.T.S.



ADVANCE WARNING SIGNAGE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NHPP-2048(900)
WIN
BRIDGE NO. 6620
20489.00
BRIDGE PLANS

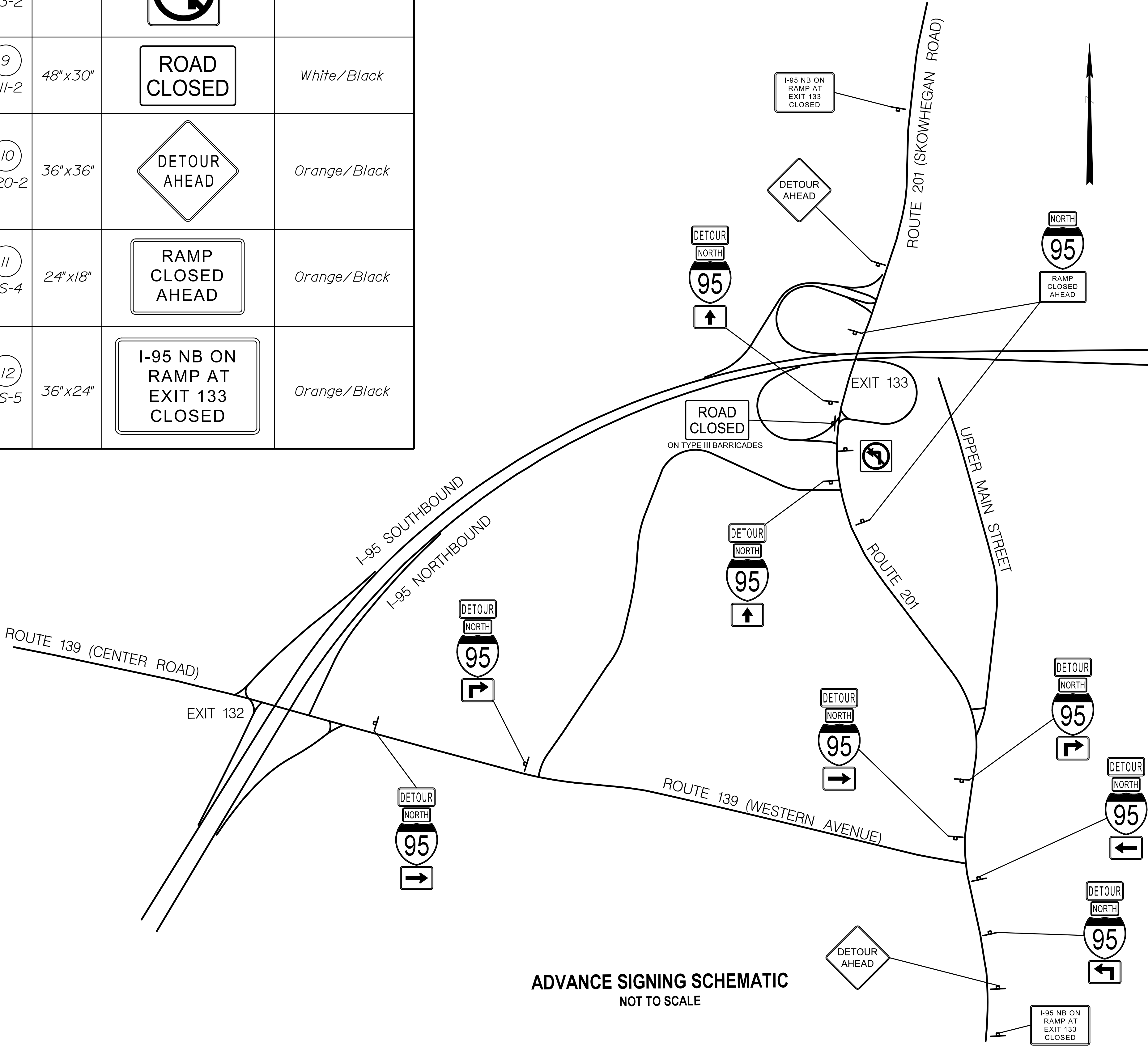
PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
M. Parlin	05/15	MPC	05/15			
DESIGN-DETAILED	L70					
CHECKED-REVIEWED	DAM					
DESIGN-DETAILED						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

INTERSTATE 95 BRIDGE	SOMERSET COUNTY
ROUTE 201	
FAIRFIELD	
MAINTENANCE OF TRAFFIC	
PHASE 2	

SHEET NUMBER
17
OF 42





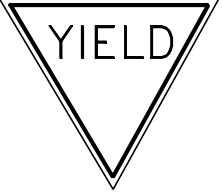
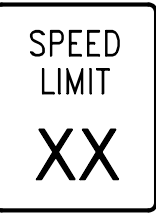




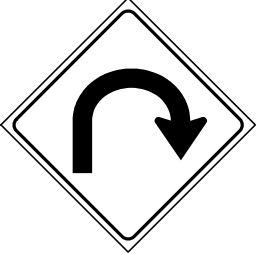




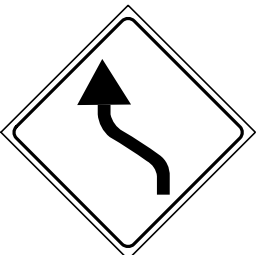
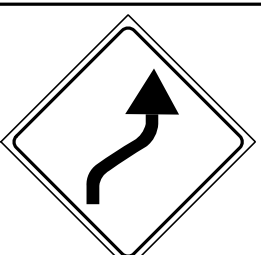
	size	sign	color of text/background
1 MI-1	24"x24"		Red&Blue/White
2 M3-1	24"x12"		Blue/White or White/Black
3 M4-8	30"x15"		Orange/Black
4 M5-1R	21"x15"		Blue/White or White/Black
5 M5-1L	21"x15"		White/Black
6 M6-1L M6-1R	21"x15"		White/Black
7 M6-3	21"x15"		White/Black




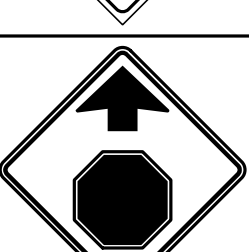
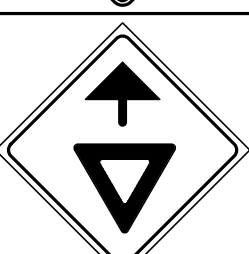

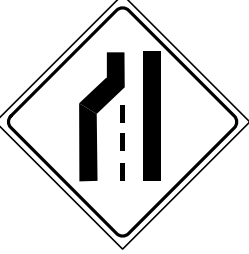
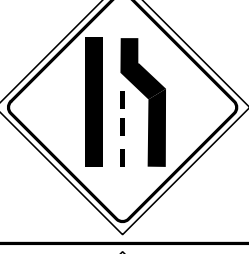



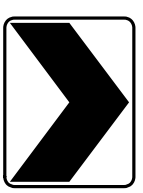

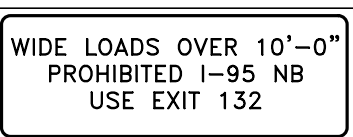
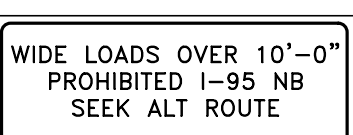

	size	sign	color of text/background
8 R3-2	24"x24"		Red&Black/White
9 R11-2	48"x30"		White/Black
10 W20-2	36"x36"		Orange/Black
11 CS-4	24"x18"		Orange/Black
12 CS-5	36"x24"		Orange/Black



GENERAL NOTES:
1. COVER CONFLICTING ROUTE AND DIRECTIONAL SIGNS.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	SIGNATURE		DATE
	SIGNATURE		DATE
	P.E. NUMBER		DATE
NHPP-2048(900)	WIN		BRIDGE NO. 5620
20489.00		BRIDGE PLANS	
INTERSTATE 95 BRIDGE ROUTE 201 SOMERSET COUNTY		DETOUR PLAN	
FAIRFIELD		SHEET NUMBER	
		18	
		OF 42	

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK- GROUND	LEGEND BORDER			
E5-1	48"	36"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			2	SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			12.00 (24.00)	
G20-2	48"	24"					5				8.00 (40.00)	
G20-5aP	48"	24"					4				8.00 (32.00)	
RI-1	48"	48"					4				16.00 (64.00)	
RI-2	36"	36"					1				4.00 (4.00)	
R2-1 (45) (55)	48"	60"					2 4				20.00 (40.00) 20.00 (80.00)	
R2-6aP	48"	24"					4				8.00 (32.00)	
R5-1a	42"	30"					2				8.75 (17.50)	
R5-1a	36"	36"					2				9.00 (18.00)	
RII-2	48"	30"					1				10.00 (10.00)	
WI-IIR	48"	48"					1				16.00 (16.00)	
WI-I3R	48"	48"					1				16.00 (16.00)	
WI3-IP (15) (25)	30"	30"					2				6.25 (12.50)	
WI3-6	36"	60"					1				15.00 (15.00)	
WI3-7	36"	60"					1				15.00 (15.00)	
WI-4L	48"	48"					1				16.00 (16.00)	
WI-4R	48"	48"					1				16.00 (16.00)	

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET	NOTES
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK- GROUND	LEGEND BORDER			
W20-1 (1 MILE) (AHEAD)	48"	48"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			4 2	SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			16.00 (64.00) 16.00 (32.00)	
W20-5L	48"	48"					4				16.00 (64.00)	
W20-5R	48"	48"					4				16.00 (64.00)	
W3-1	48"	48"					1				16.00 (16.00)	
W3-2a	48"	48"					1				16.00 (16.00)	
W4-1	48"	48"					1				16.00 (16.00)	
W4-2L	48"	48"					4				16.00 (64.00)	
W4-2R	48"	48"					4				16.00 (64.00)	
W9-2L	48"	48"					4				16.00 (64.00)	
W9-2R	48"	48"					4				16.00 (64.00)	
W9-7	132"	72"					1				66.00 (66.00)	
WI-8	36"	48"					5				12.00 (60.00)	
WL-1	96"	48"					1				32.00 (32.00)	
WL-2	96"	48"					1				32.00 (32.00)	
WL-3	96"	48"					2				32.00 (64.00)	
PLAQUE	96"	24"		10" E			1				16.00 (16.00)	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2048(900)

WIN
20489.00

BRIDGE NO. 6620

BRIDGE PLANS

INTERSTATE 95 BRIDGE
ROUTE 201
FAIRFIELD SOMERSET COUNTY

SIGN SUMMARY

SHEET NUMBER

19

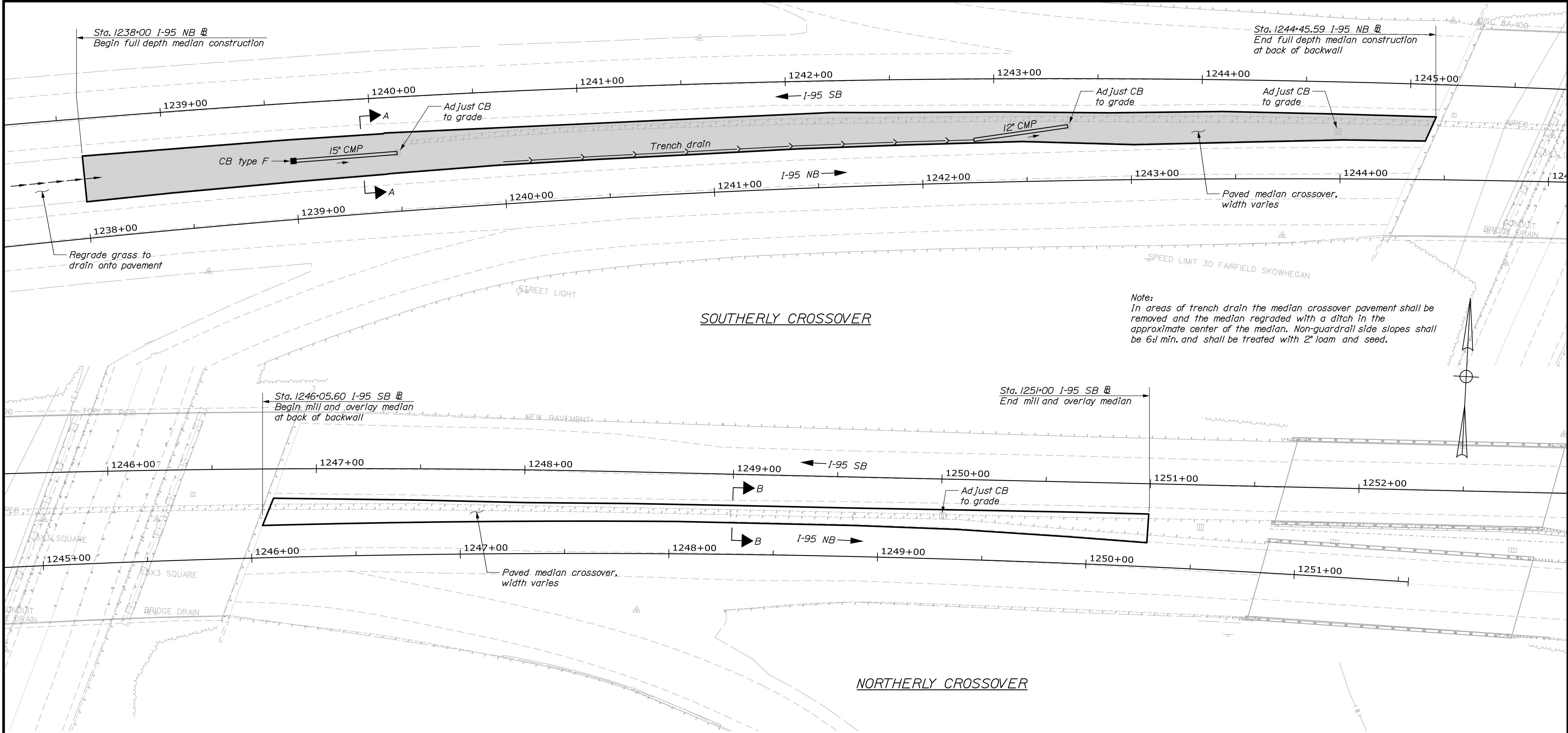
OF 42

Date:6/18/2015

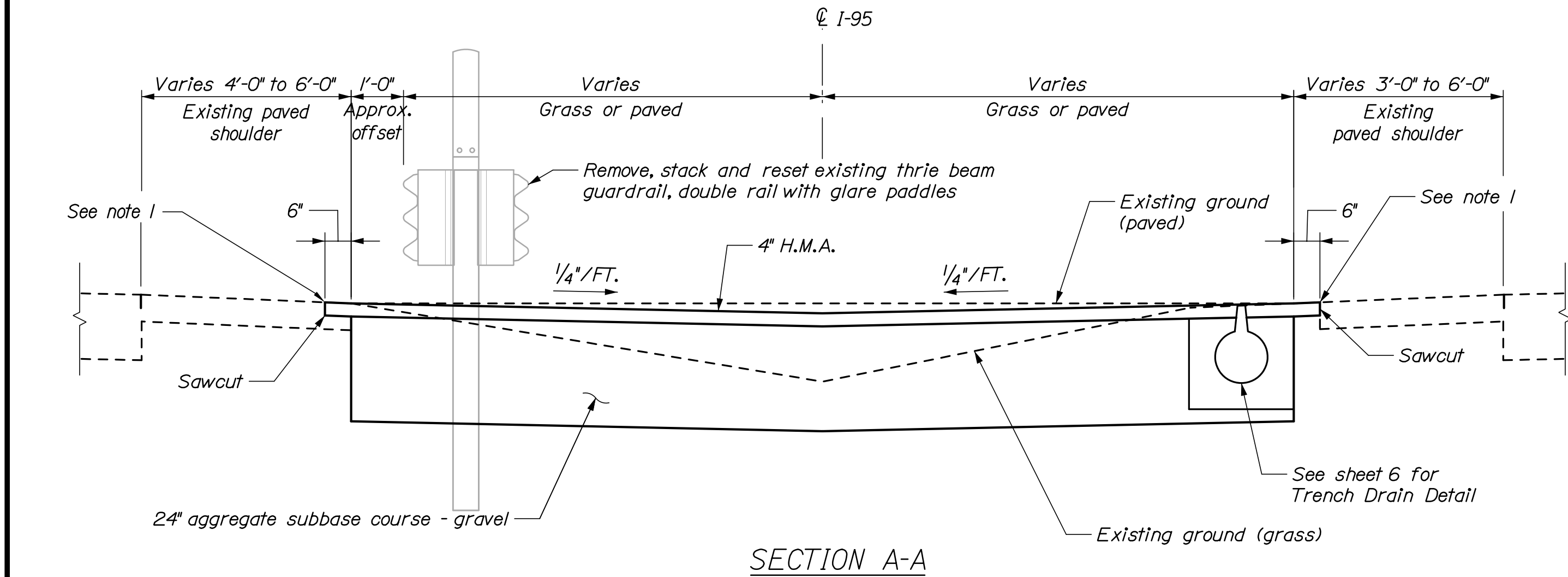
Username:

Division:

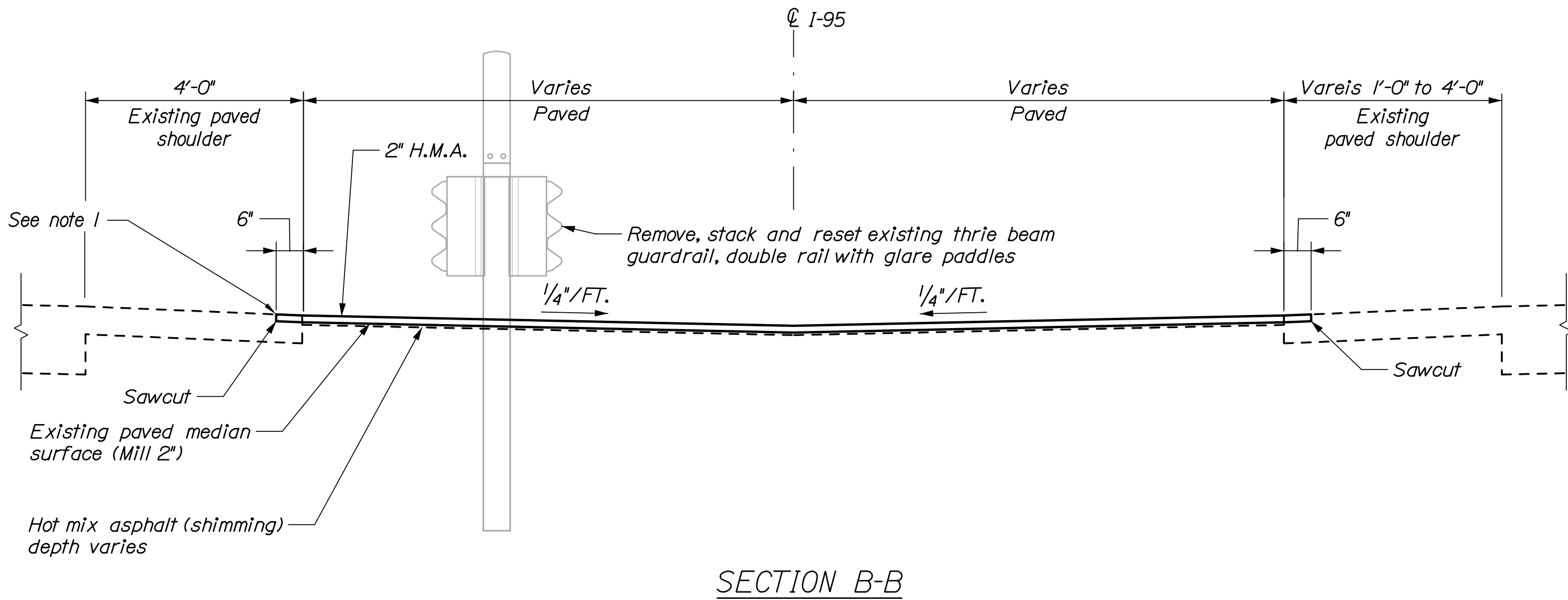
Filename: 020_M0TDets.dgn



Note:
In areas of trench drain the median crossover pavement shall be removed and the median regraded with a ditch in the approximate center of the median. Non-guardrail side slopes shall be 6:1 min. and shall be treated with 2" loam and seed.



NOTES:
1. Coat surface mix vertical face with hot rubberized asphalt. Coat base mix vertical face with tack coat (incidental to the expressway median crossover item).



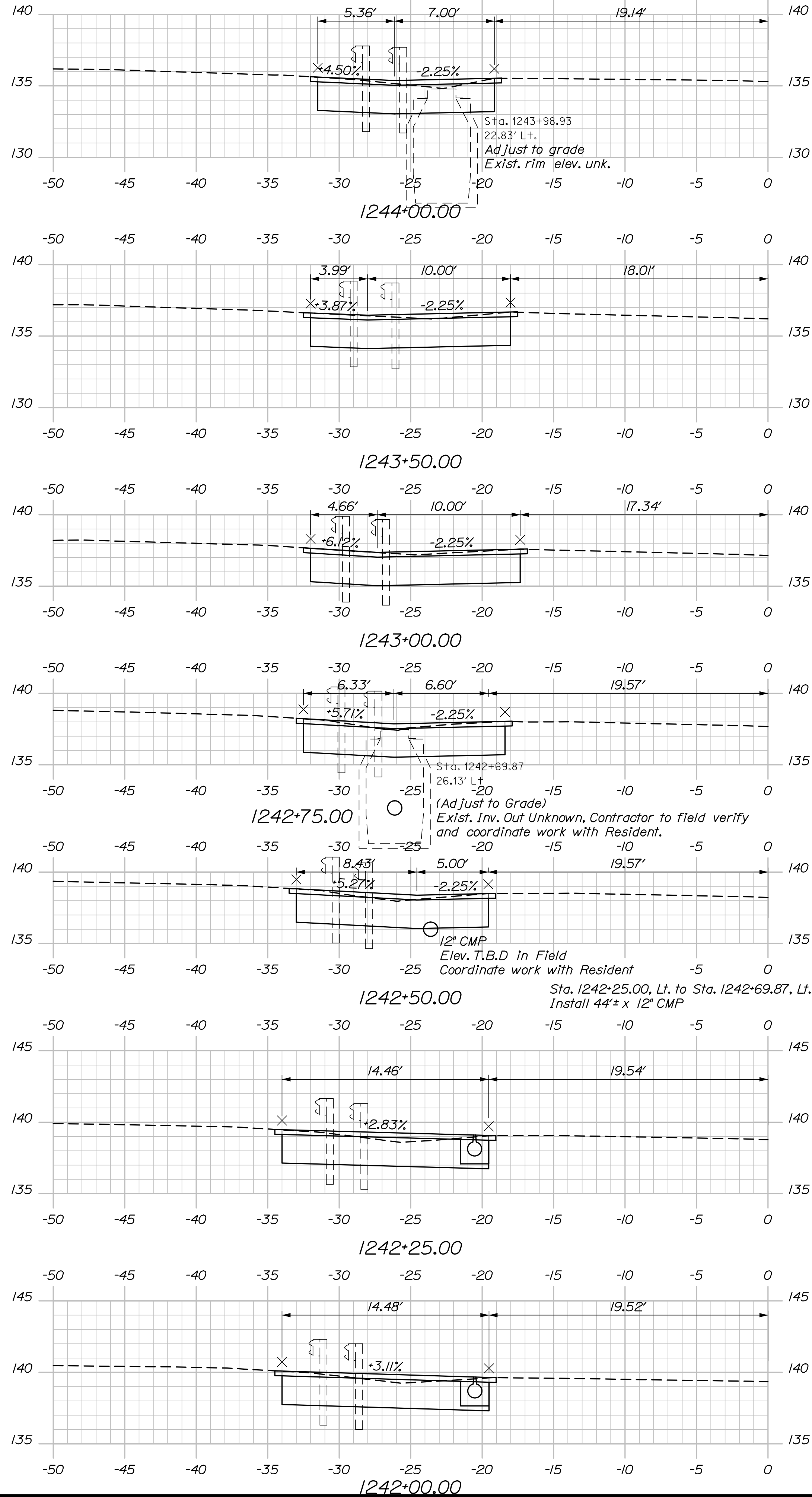
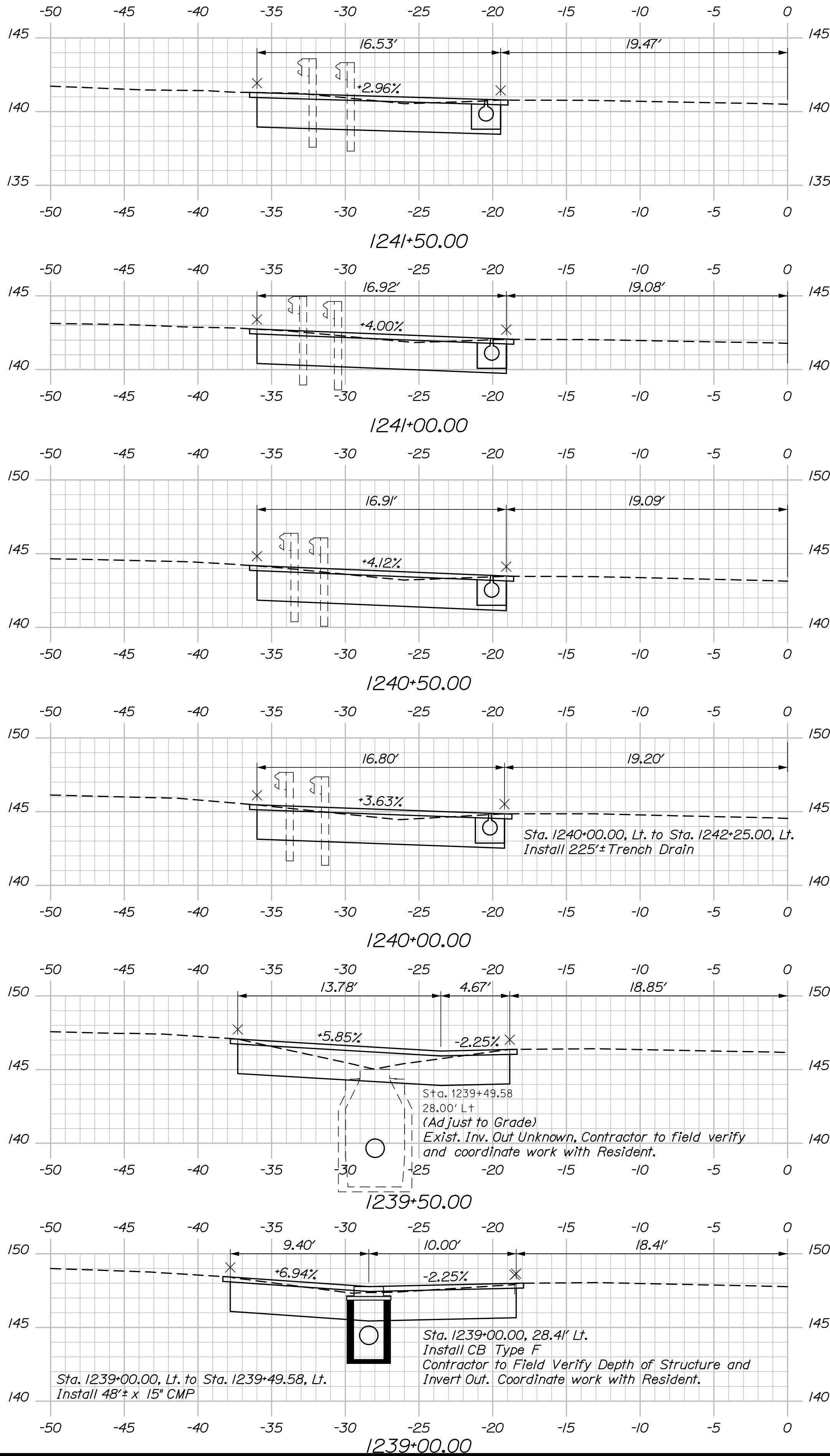
NOTES:
1. Coat surface mix vertical face with hot rubberized asphalt. Coat base mix vertical face with tack coat (incidental to the expressway median crossover item).

STATE OF MAINE DEPARTMENT OF TRANSPORTATION				NHP-2048(900)				BRIDGE NO. 5620 WIN 20489.00				BRIDGE PLANS			
INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY				MAINTENANCE OF TRAFFIC DETAILS				SHEET NUMBER 20 OF 42							
PROJ. MANAGER	M. Parlin	BY	DATE	DESIGNED-DETAILED	L7D	CHECKED-REVIEWED	MPG	DATE	05/15	SIGNATURE		DESIGNED-DETAILED		P.E. NUMBER	
DESIGNED-DETAILED				DESIGNED-DETAILED		DESIGNED-DETAILED		DATE				DESIGNED-DETAILED			
REVISIONS 1				REVISIONS 1		REVISIONS 1		DATE				REVISIONS 1			
REVISIONS 2				REVISIONS 2		REVISIONS 2		DATE				REVISIONS 2			
REVISIONS 3				REVISIONS 3		REVISIONS 3		DATE				REVISIONS 3			
REVISIONS 4				REVISIONS 4		REVISIONS 4		DATE				REVISIONS 4			
FIELD CHANGES				FIELD CHANGES		FIELD CHANGES		DATE				FIELD CHANGES			

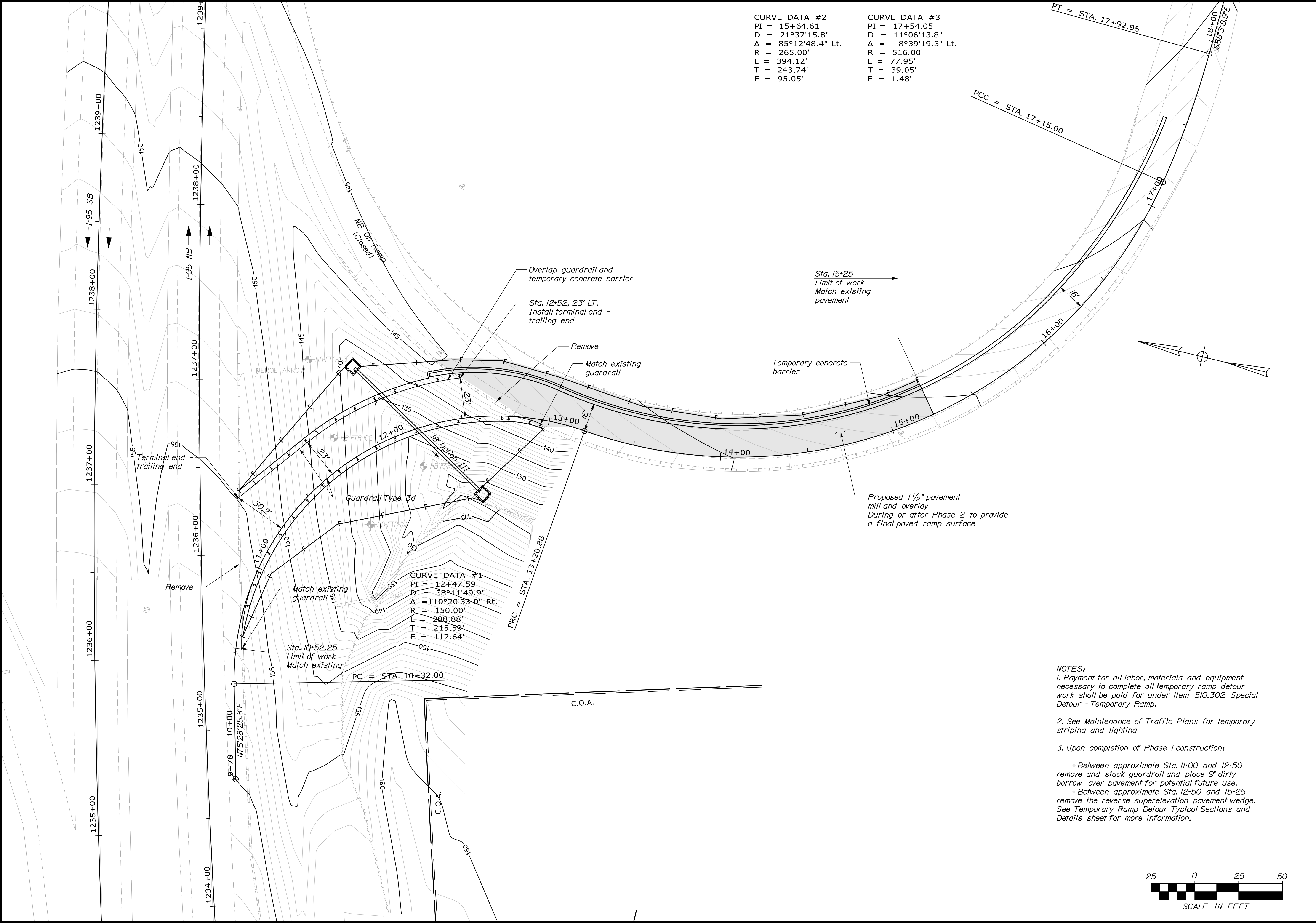
Username: Date:6/18/2015

Division:

Filename: xsect.dgn



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	NHP-2048(900)		BRIDGE PLANS	
	WIN		20489.00	
	BRIDGE NO. 6620			
INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY	PROJ. MANAGER	DATE	BY	DATE
	DESIGN-DETAILED	05/15	RWH	05/15
	CHECKED-REVIEWED	DAM	-	-
	DESIGN-DETAILED	-	-	-
MEDIAN CROSSOVER CROSS SECTIONS	REVISIONS 1	-	-	-
	REVISIONS 2	-	-	-
	REVISIONS 3	-	-	-
	REVISIONS 4	-	-	-
FIELD CHANGES		DATE		
SHEET NUMBER		21		
OF 42				



CURVE DATA #2
PI = 15+64.61
D = 21°37'15.8"
Δ = 85°12'48.4" Lt.
R = 265.00'
L = 394.12'
T = 243.74'
E = 95.05'

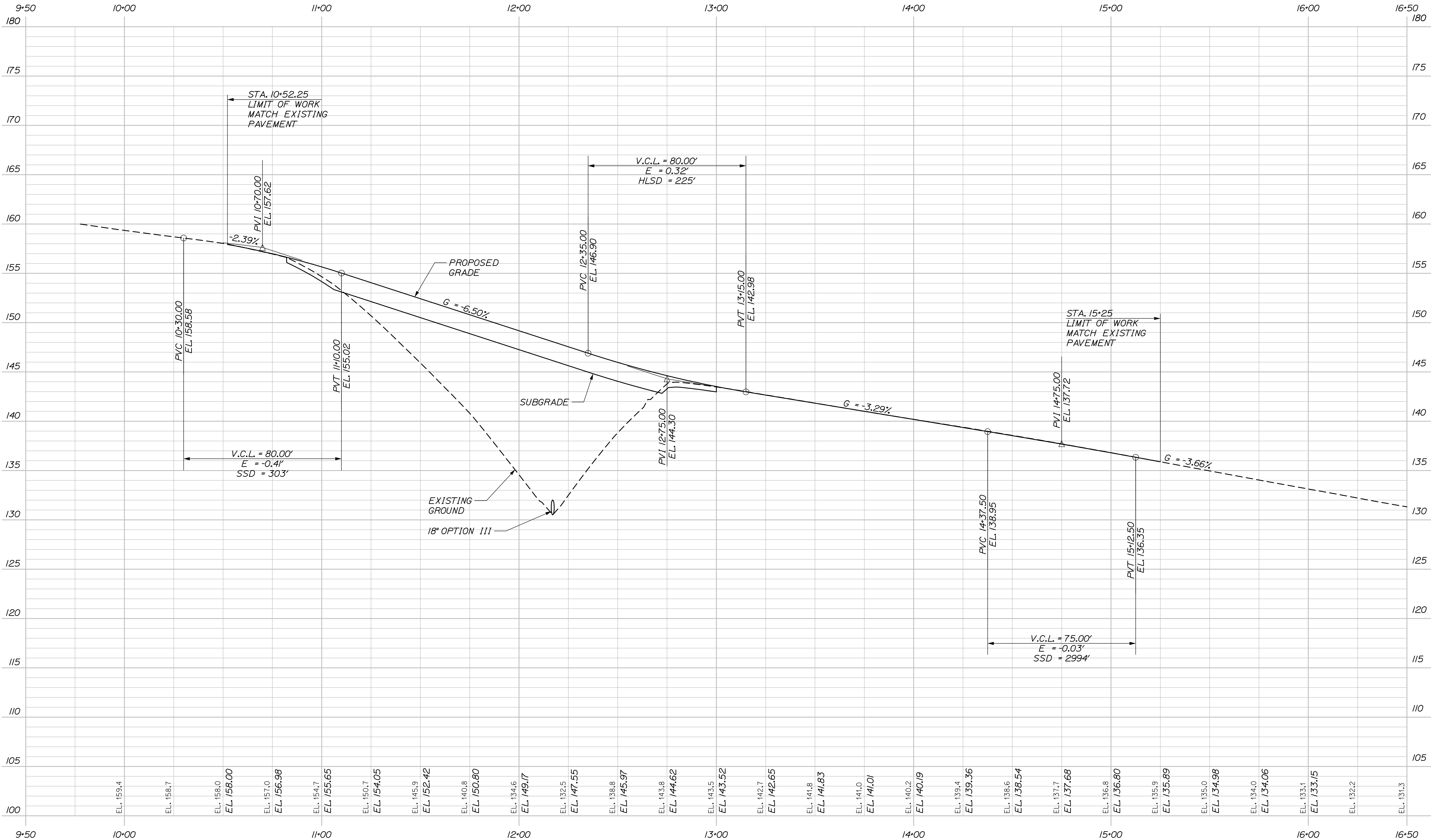
CURVE DATA #3
PI = 17+54.05
D = 11°06'13.8"
Δ = 8°39'19.3" Lt.
R = 516.00'
L = 77.95'
T = 39.05'
E = 1.48'

CURVE DATA #1
PI = 12+47.59
D = 38°11'49.9"
Δ = 110°20'33.0" Rt.
R = 150.00'
L = 288.88'
T = 215.59'
E = 112.64'

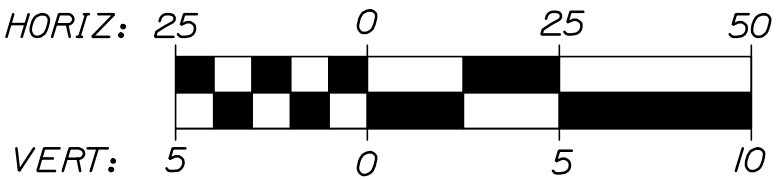
NOTES:
1. Payment for all labor, materials and equipment necessary to complete all temporary ramp detour work shall be paid for under item 510.302 Special Detour - Temporary Ramp.
2. See Maintenance of Traffic Plans for temporary striping and lighting
3. Upon completion of Phase I construction:
• Between approximate Sta. 11+00 and 12+50 remove and stack guardrail and place 9" dirty borrow over pavement for potential future use.
• Between approximate Sta. 12+50 and 15+25 remove the reverse superelevation pavement wedge. See Temporary Ramp Detour Typical Sections and Details sheet for more information.



STATE OF MAINE DEPARTMENT OF TRANSPORTATION NHPP-2048(900)	DATE		BY		SIGNATURE	
	05/15		MPC		05/15	
	DESIGN-DETAILED		L7D		DESIGN-DETAILED	
FAIRFIELD SOMERSET COUNTY GENERAL PLAN - TEMPORARY RAMP DETOUR	DATE		BY		SIGNATURE	
	-		-		-	
	DESIGN-DETAILED		L7D		DESIGN-DETAILED	
SHEET NUMBER 22 OF 42	DATE		BY		SIGNATURE	
	-		-		-	
	DESIGN-DETAILED		L7D		DESIGN-DETAILED	
BRIDGE PLANS BRIDGE NO. 5620 20489.00 WIN	DATE		BY		SIGNATURE	
	-		-		-	
	DESIGN-DETAILED		L7D		DESIGN-DETAILED	



PROFILE



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

NHPP-2048(900)

BRIDGE NO. 5820
WIN
20489.00

BRIDGE PLANS

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	LZD	MPC	05/15
CHECKED-REVIEWED	DAM	-	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

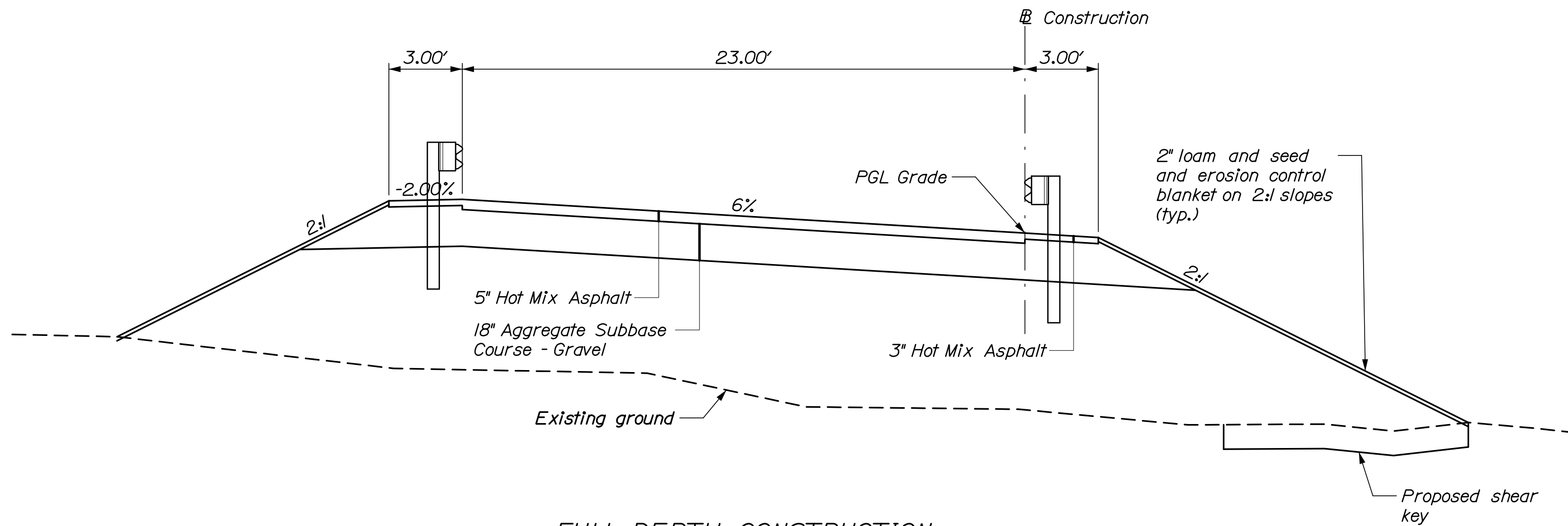
INTERSTATE 95 BRIDGE
ROUTE 201
FAIRFIELD SOMERSET COUNTY

TEMPORARY RAMP
PROFILE

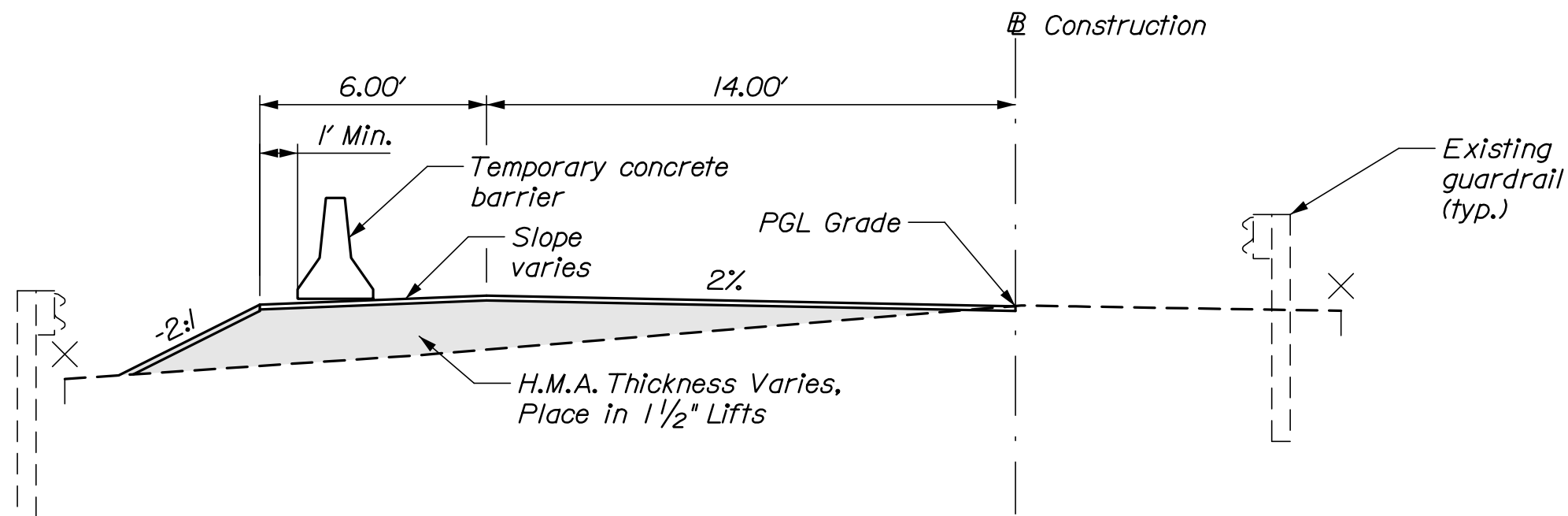
SHEET NUMBER

23

OF 42

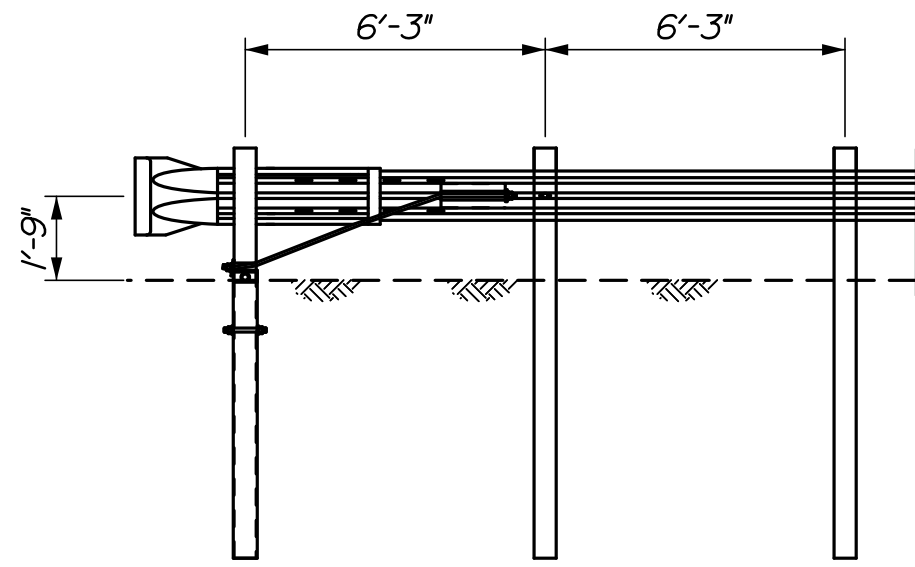


FULL DEPTH CONSTRUCTION
SUPERELEVATED, $e_{max} = 0.06$



REVERSE SUPERELEVATION

NOTES:
1. Upon completion of Phase I Construction, the reverse super-elevation pavement wedge shall be removed utilizing a medium or fine cut drum milling machine (Pay Item 202.2023) to provide a ramp with a serviceable condition and a cross slope the replicates the preconstruction ramp condition.



TERMINAL END - TRAILING END

SHEET NUMBER

24

OF 42

INTERSTATE 95 BRIDGE
ROUTE 201
FAIRFIELD SOMERSET COUNTY
TEMPORARY RAMP DETOUR
TYPICAL SECTIONS AND DETAILS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NHP-2048(900)
BRIDGE NO. 5620
WIN 20489.00
BRIDGE PLANS

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	LZD	MPC	05/15
CHECKED-REVIEWED	DAM	-	05/15
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

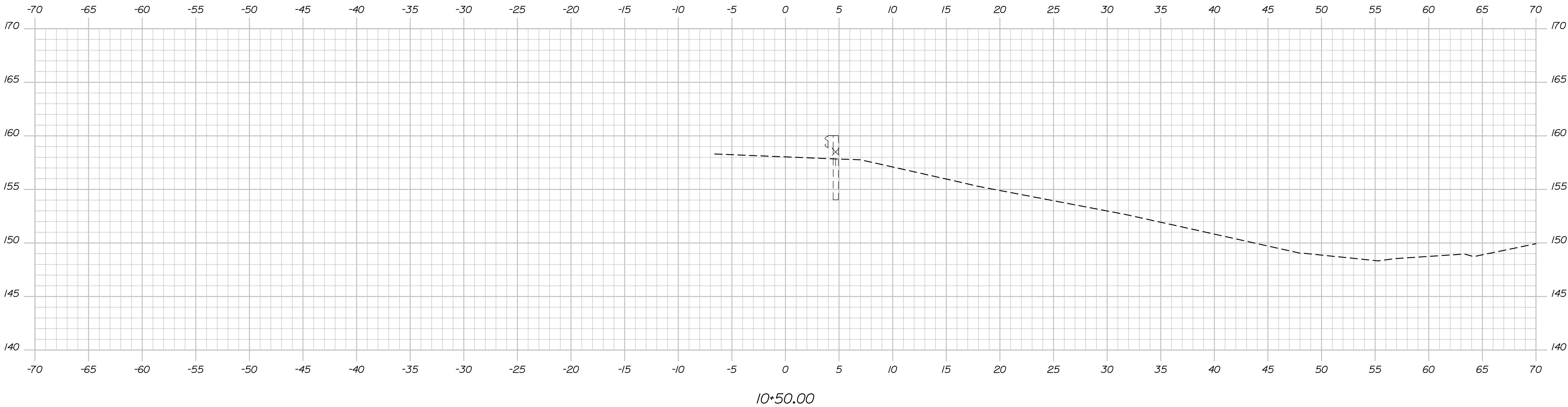
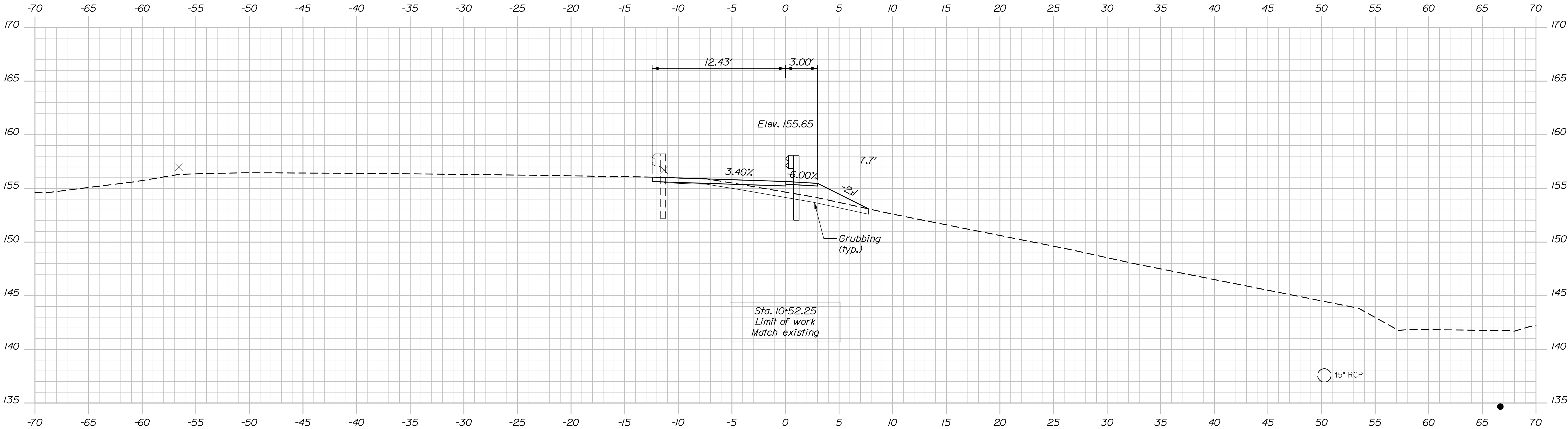
SIGNATURE	P.E. NUMBER	DATE

Date:6/18/2015

Username:

Division:

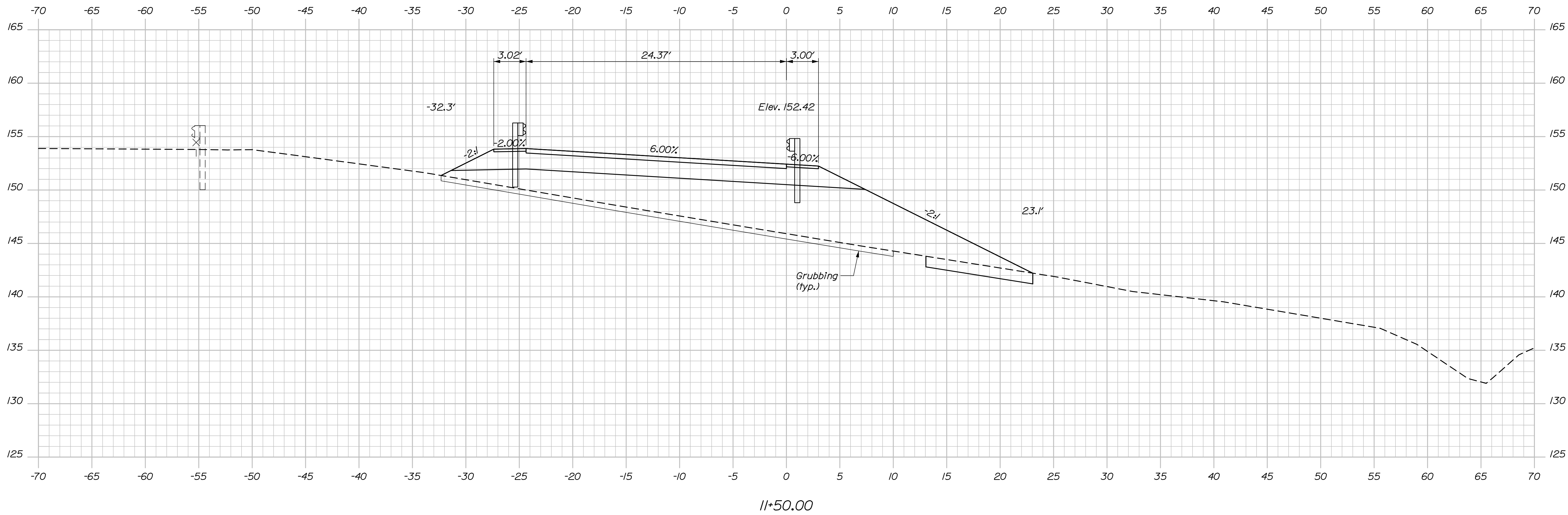
Filename: xsect.dgn



PROJ. MANAGER	M. Parlin	BY	DATE
CHECKED-REVIEWED	L7D	MPC	05/15
DESIGN-DETAILED	-	-	05/15
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE	P.E. NUMBER	DATE

Filename: xsect.dgn



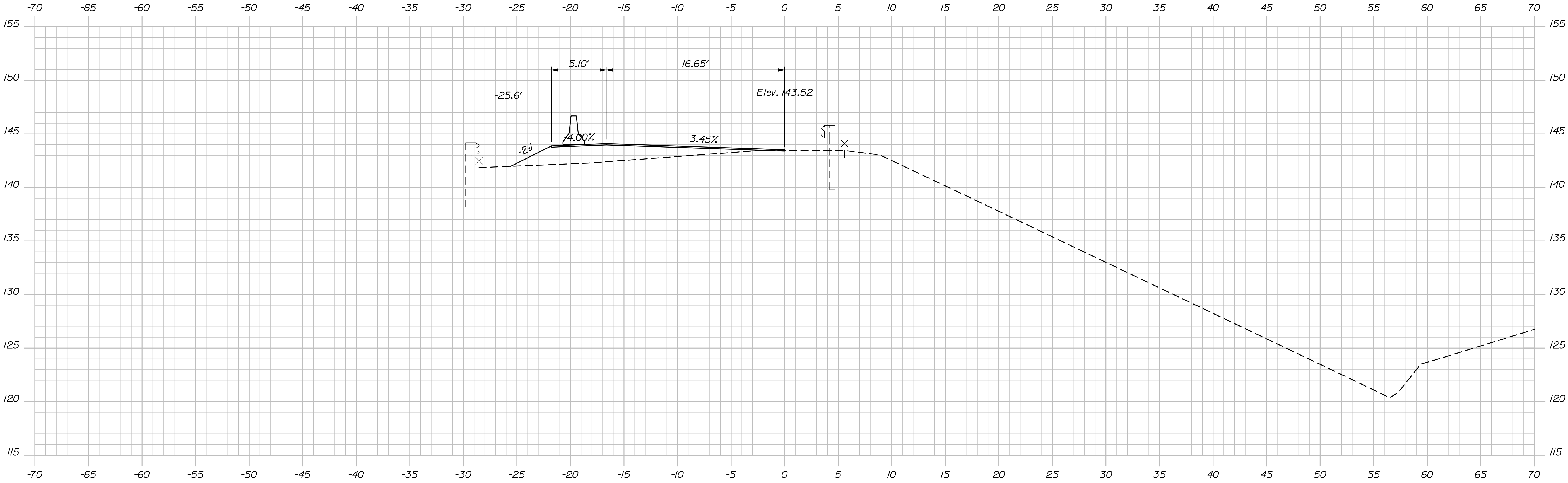
26 OF 42	SHEET NUMBER	INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY				PROJ. MANAGER	M. Parlin	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION NHPP-2048(900) WIN 20489.00 BRIDGE NO. 5820 BRIDGE PLANS											
		TEMPORARY RAMP DETOUR CROSS SECTIONS				CHECKED-DETAILED	LJD	MPC	05/15												
						DESIGNED-REVIEWED DAM					-	-	05/15								
											DESIGNS DETAILED				-	-	-				
															REVISIONS 1				-	-	-
																			REVISIONS 2		
		REVISIONS 3				-	-	-													
						REVISIONS 4					-	-	-								
		FIELD CHANGES									-	-	-								
						DATE					-	-	-								
P.E. NUMBER				-	-					-											

Username:

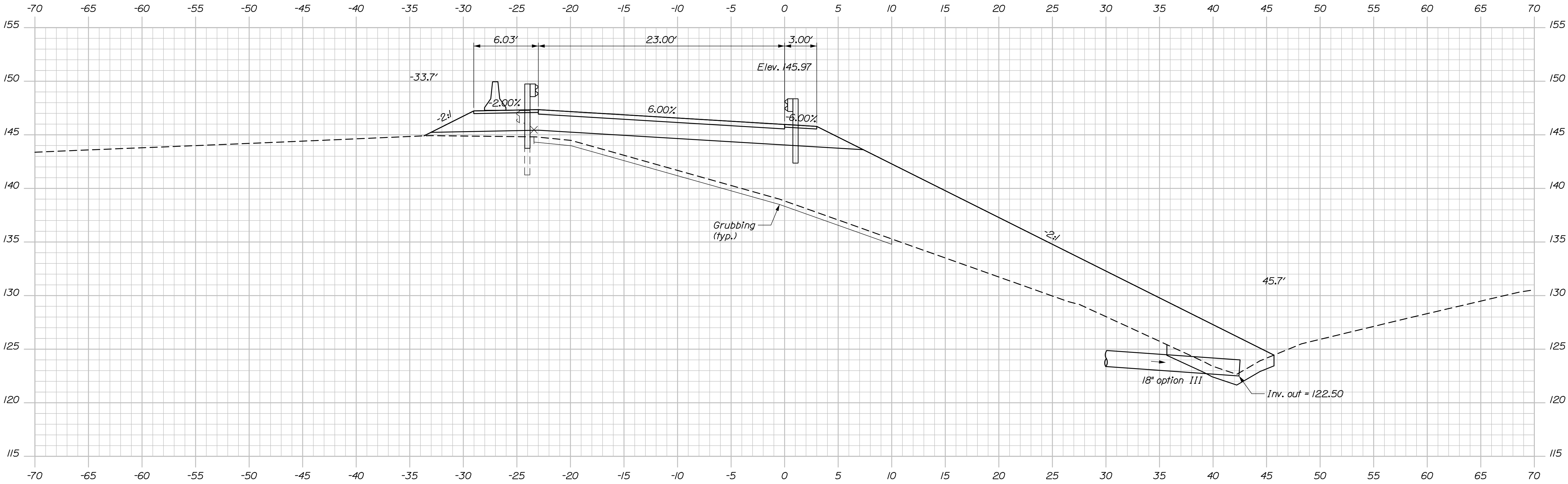
Date:6/18/2015

Division:

Filename: xssect.dgn



13+00.00



12+50.00

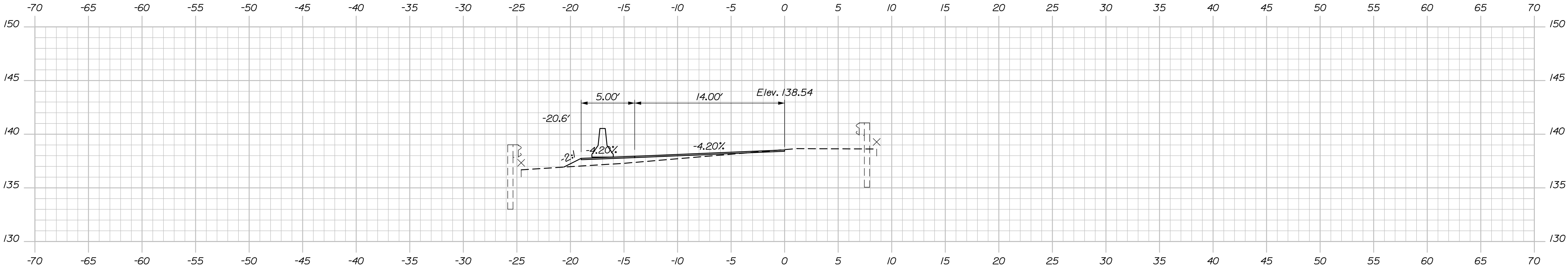
PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	L7D	MPC	05/15
CHECKED-REVIEWED	DAM	-	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

Date:6/18/2015

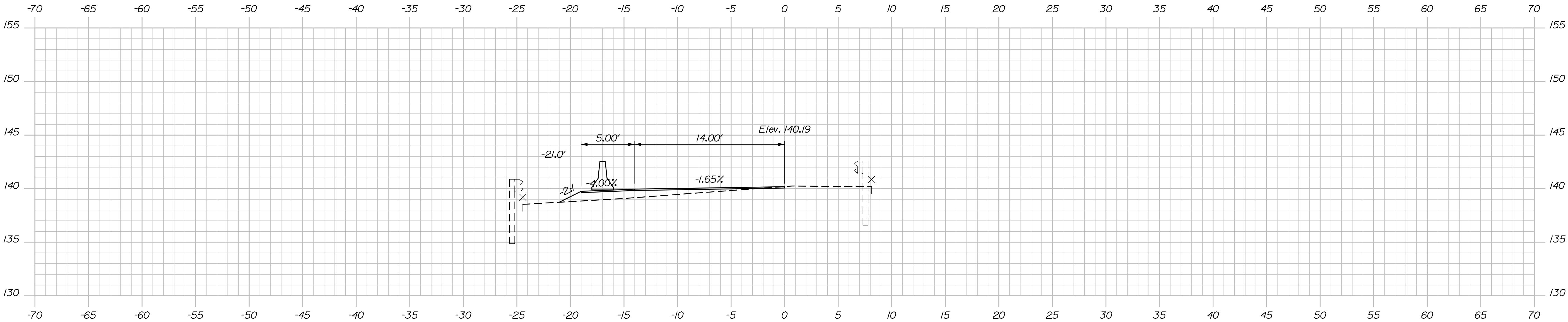
Username:

Division:

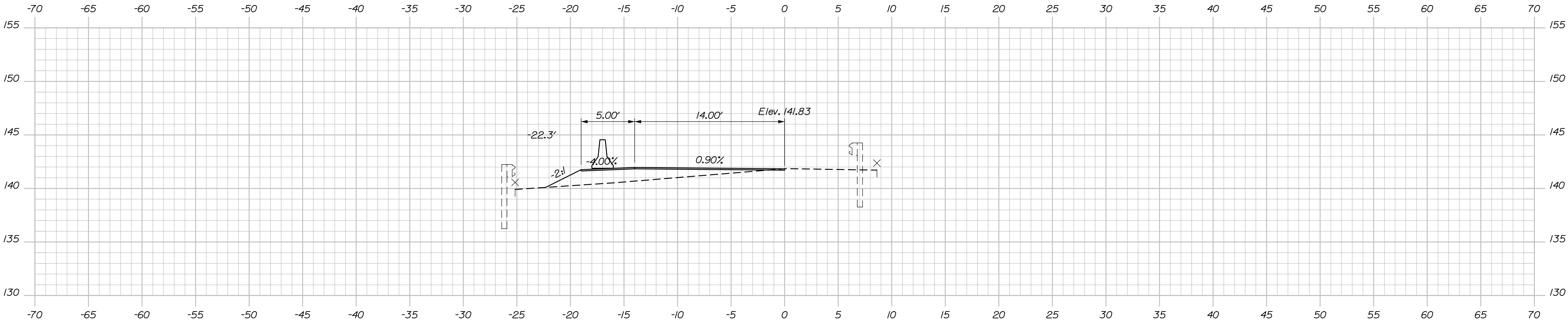
Filename: xssect.dgn



14+50.00



14+00.00



13+50.00

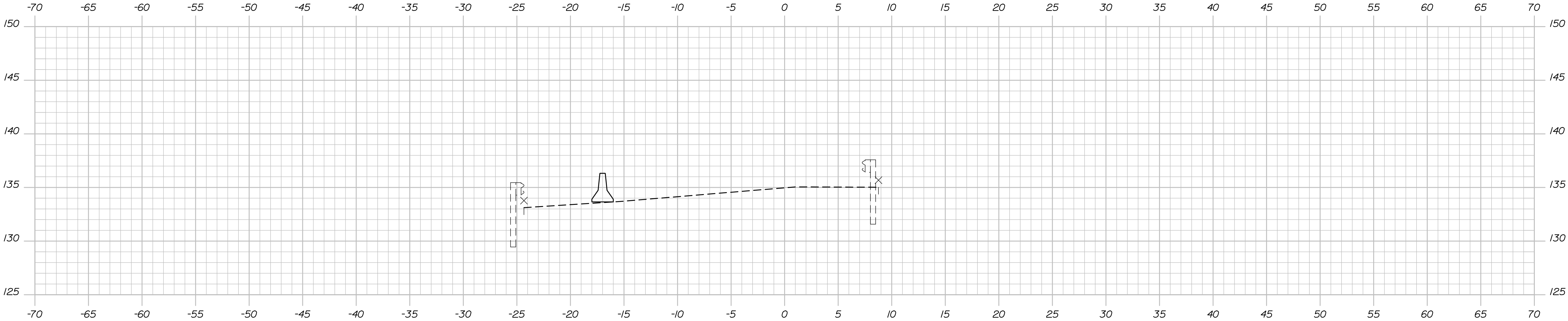
PROJ. MANAGER	M. Parlin	BY	DATE	SIGNATURE
DESIGN-DETAILED	L7D	MPC	05/15	
CHECKED-REVIEWED	DAM	-	05/15	
DESIGN-DETAILED	-	-	-	P.E. NUMBER
DESIGN-DETAILED	-	-	-	DATE
REVISIONS 1	-	-	-	
REVISIONS 2	-	-	-	
REVISIONS 3	-	-	-	
REVISIONS 4	-	-	-	
FIELD CHANGES	-	-	-	

Date:6/18/2015

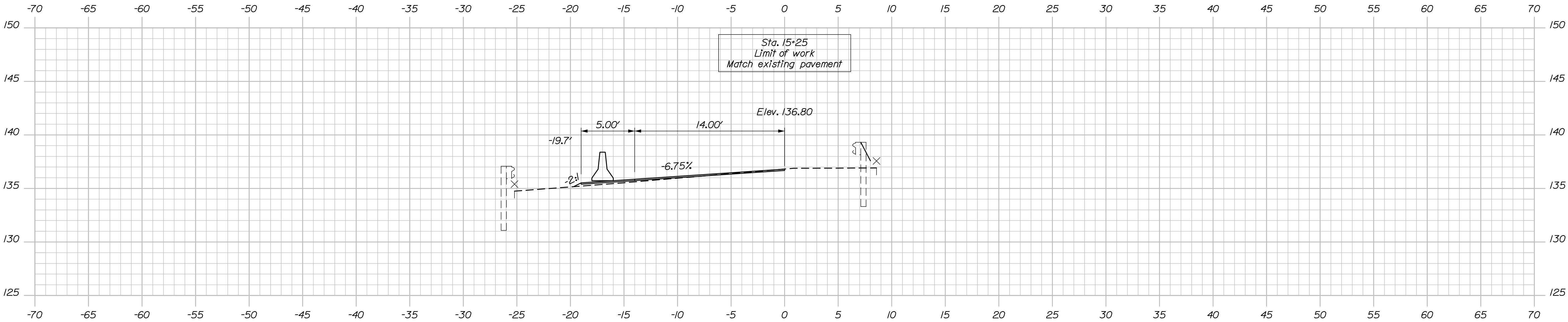
Username:

Division:

Filename: xssect.dgn



15+50.00



15+00.00

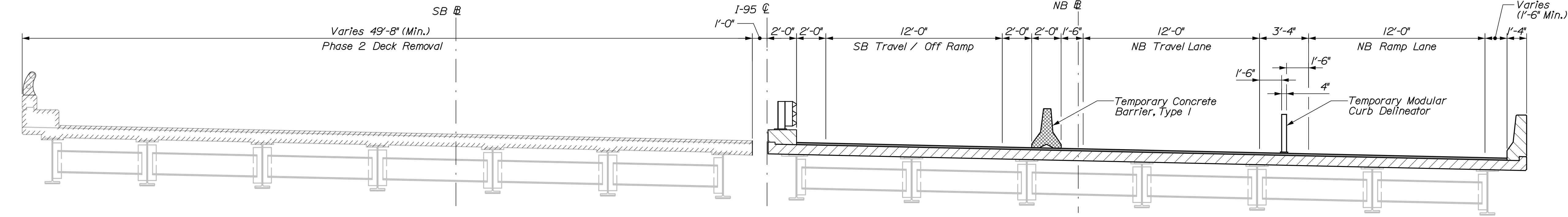
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NHPP-2048(900)
BRIDGE NO. 5820
WIN
20489.00
BRIDGE PLANS

PROJ. MANAGER	M. Parlin	BY	DATE
DESIGN-DETAILED	L7D	MPC	05/15
CHECKED-REVIEWED	DAM	-	05/15
DESIGN-DETAILED	-	-	-
DESIGN-DETAILED	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

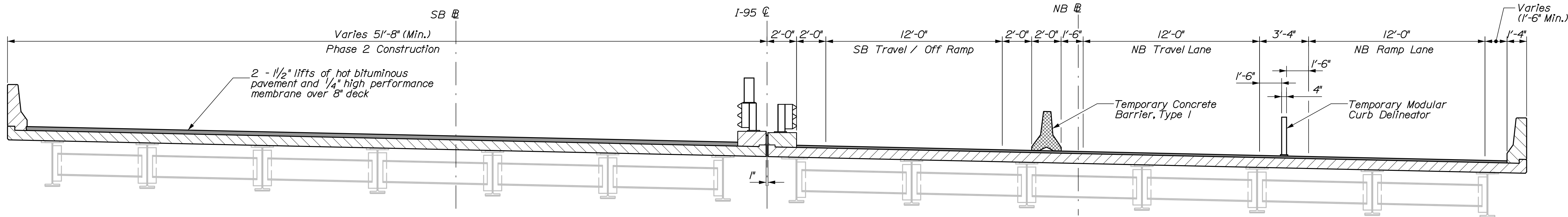
INTERSTATE 95 BRIDGE	ROUTE 201	SOMERSET COUNTY
FAIRFIELD		
TEMPORARY RAMP DETOUR		
CROSS SECTIONS		

SHEET NUMBER
29
OF 42

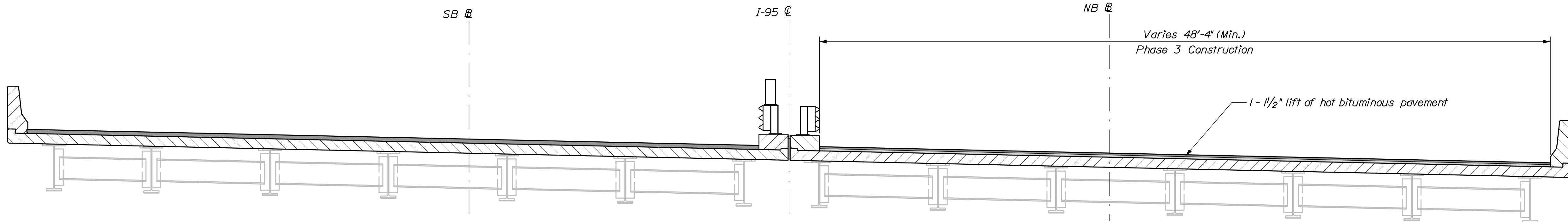
Maine Department of Transportation				Project: Ex'tl 153 Temporary NB off Ramp Interstate 95 at Route 201 Location: Fairfield, Maine		Boring No.: HB-FTR-104					
Soil/Bank Exploration Log US CUSTOMARY UNITS						PIN: 20489.00					
Driller: New England Boring Contractors		Elevation (ft.): 126.0		Auger ID/DD: 2.25"/ID / 5.88"/OD							
Operator: Schoefer / Titus		Datum: NAVD88		Sampler: Standard Split-Spoon							
Logged By: Schonewald		Rig Type: Mobile Drill B-55, bombardier		Hammer Wt./Fall: 140lb / 30"							
Date Start/Finish: 3/18/15 1125-1305		Drilling Method: Hollow Stem Auger		Core Boreal: N/A							
Boring Location: 12+it.9, 20.1 ft Rt.		Casing ID/DD: N/A		Water Level#: 3.1 ft (open)							
Hammer Efficiency Factor: 0.6		Hammer Type: Automatic <input type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathode <input checked="" type="checkbox"/>									
Definitions: S = Rock Core Sample SSA = Solid Stem Auger MS = Hollow Stem Auger I = Thin Wall Tube Sample MI = Unconsolidated Thin Wall Tube Sample attempt W = Weight of 140 lb hammer V = Initial Vane Shear Test PE = Pocket Penetration Test WC = Unconsolidated Wireline Cone Shear Test BSL = Bulk Density of soil section		S = Rock Core Sample SSA = Solid Stem Auger HSA = Hollow Stem Auger RC = Rotary Core WD = Weight of 140 lb hammer V = Initial Vane Shear Test PE = Pocket Penetration Test WC = Unconsolidated Wireline Cone Shear Test BSL = Bulk Density of soil section		Surge = Lab Vane Shear Strength (psf) MC = water content, percent LL = Liquid Limit PL = Plasticity Limit PI = Plasticity Index N _a = SPT uncorrected corrected for hammer efficiency C = Compression Test							
Sample Information											
Depth (ft.)	Sample No.	Pen./Meas. (in.)	Sample Depth (ft.)	Probe U/S In-Shear Strength or Rod (lb)	Unclassified	N _a	Casing ID/DD	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results / ASHTO and Unified Class
0										Snow over grass and loam.	
5	10	24/10	4.00 - 6.00	3/5/4/11	7	7				Grey-brown, wet, loose, fine to coarse SAND, some silt, some gravel, trace clay, (TILL).	GM263346 A-4, SC-SM MC=17.6%
										7.5 ft. - Boney material based upon drilling behavior.	
10	20	24/8	9.00 - 11.00	1/7/14/8	21	21				Grey-brown, wet, medium dense, fine to coarse SAND, some gravel, some silt, trace clay, (TILL).	GM263347 A-2-4, SC-SM MC=12.3%
15	30	24/11	14.00 - 16.00	15/9/9/18	18	18				Grey-brown, wet, medium dense, fine to coarse SAND, some silt, some gravel, little clay, (TILL).	GM263348 A-4, SC-SM MC=12.1%
20								109.00		Bottom of Exploration at 15.00 feet below ground surface. No refusal encountered.	
Remarks:											
Stratification lines represent approximate boundaries between soil types; transitions may be gradual.											
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.											
Boring No.: HB-FTR-104											



PHASE 2 DEMOLITION

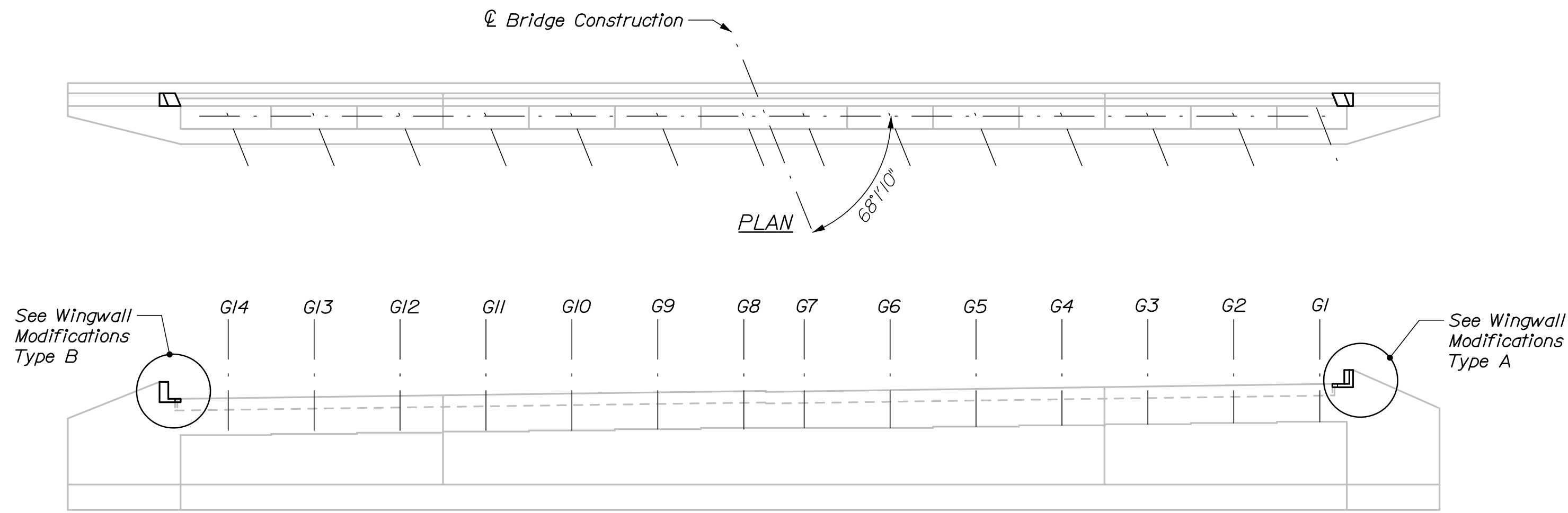


PHASE 2 CONSTRUCTION

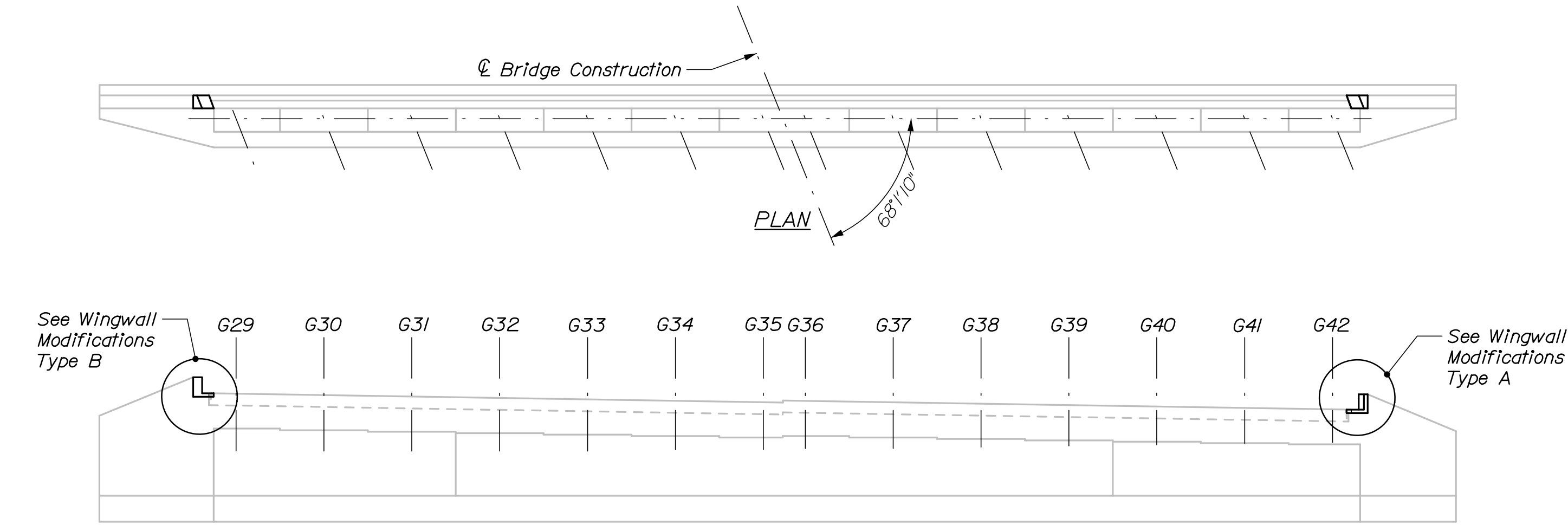


PHASE 3 - FINAL PAVING NORTHBOUND

32		SHEET NUMBER		INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY		CONSTRUCTION STAGING 2		STATE OF MAINE DEPARTMENT OF TRANSPORTATION NHP-2048(900)			
OF 42				PROJ. MANAGER		M. Parlin		BY		DATE	
				DESIGN-DETAILED		AET		FEB		05/15	
				CHECKED-REVIEWED		AUF		-		05/15	
				DESIGN2-DETAILED2		-		-		-	
				DESIGN3-DETAILED3		-		-		-	
				REVISIONS 1		-		-		P.E. NUMBER	
				REVISIONS 2		-		-		-	
				REVISIONS 3		-		-		-	
				REVISIONS 4		-		-		DATE	
				FIELD CHANGES		-		-		-	
										BRIDGE NO. 5820	
										WIN 20489.00	
										BRIDGE PLANS	

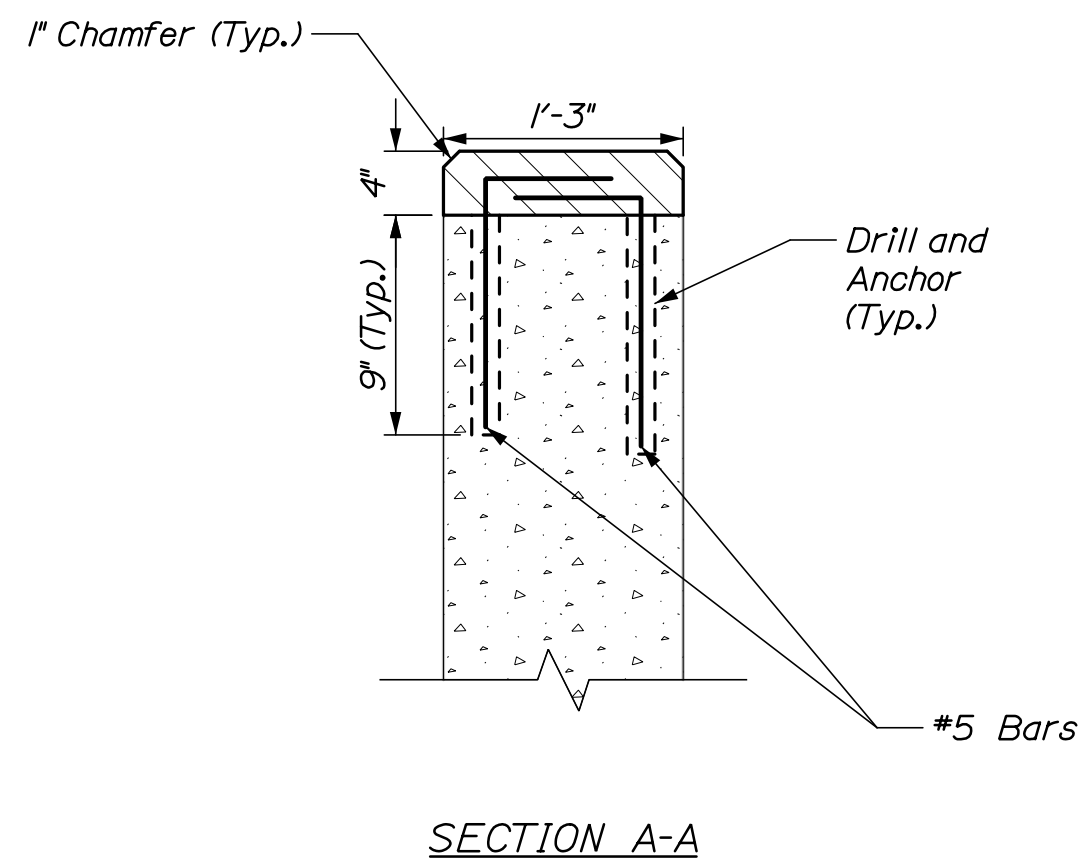


ELEVATION
WEST ABUTMENT

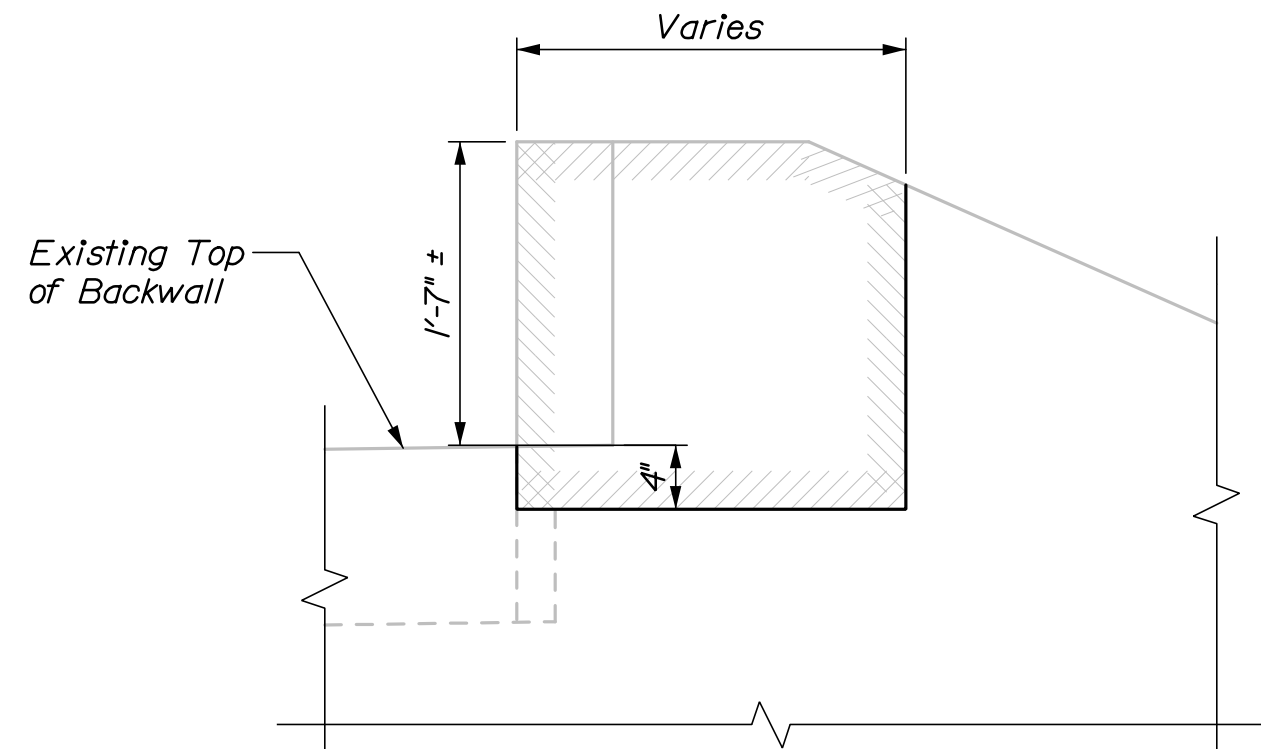


ELEVATION
EAST ABUTMENT

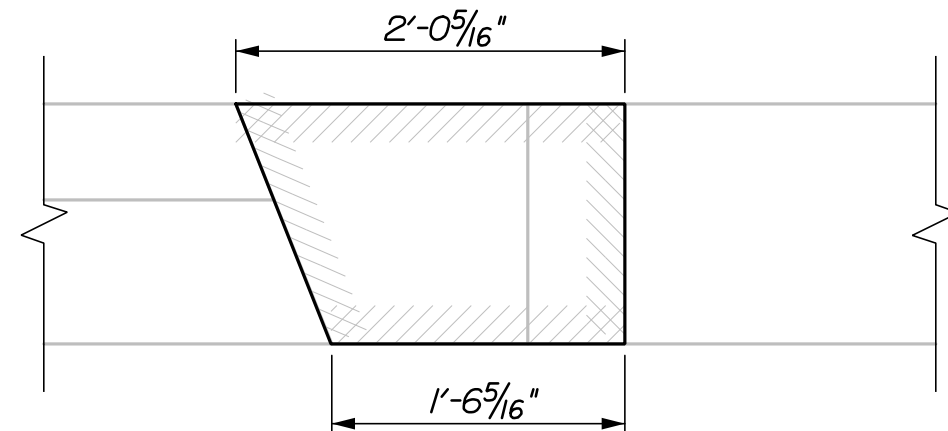
- Notes:
1. For girder framing key plan see sheet 35.
 2. Reinforcement for wingwall modifications shall be incidental to related concrete pay items.



SECTION A-A

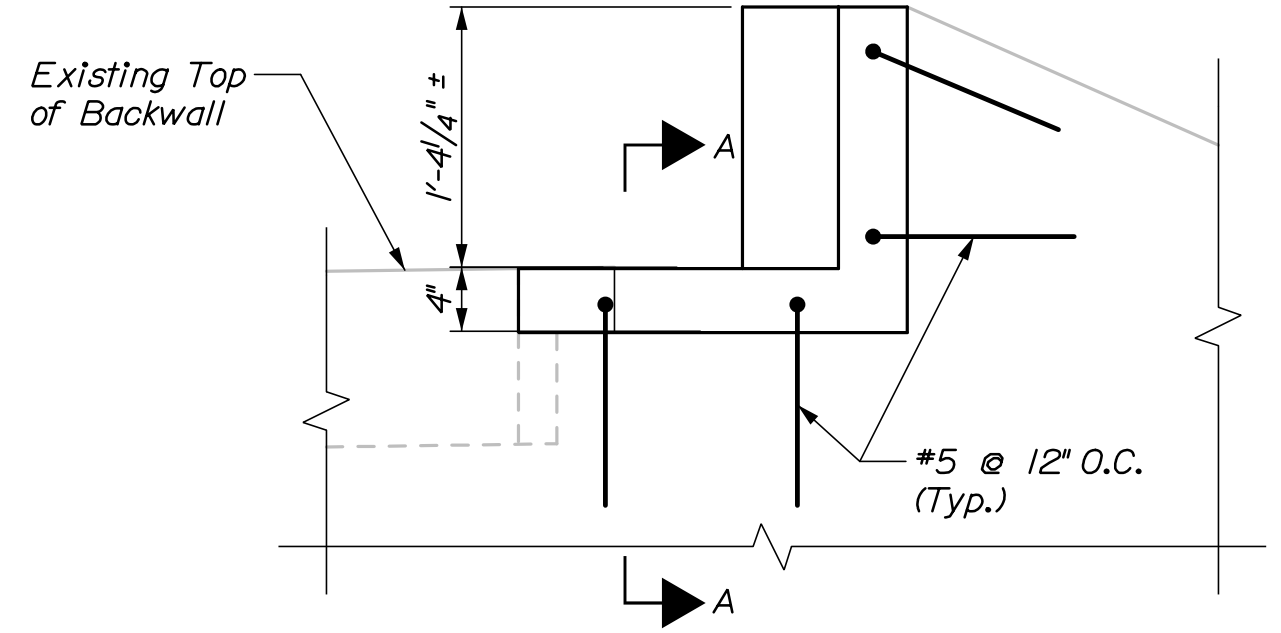


Elevation

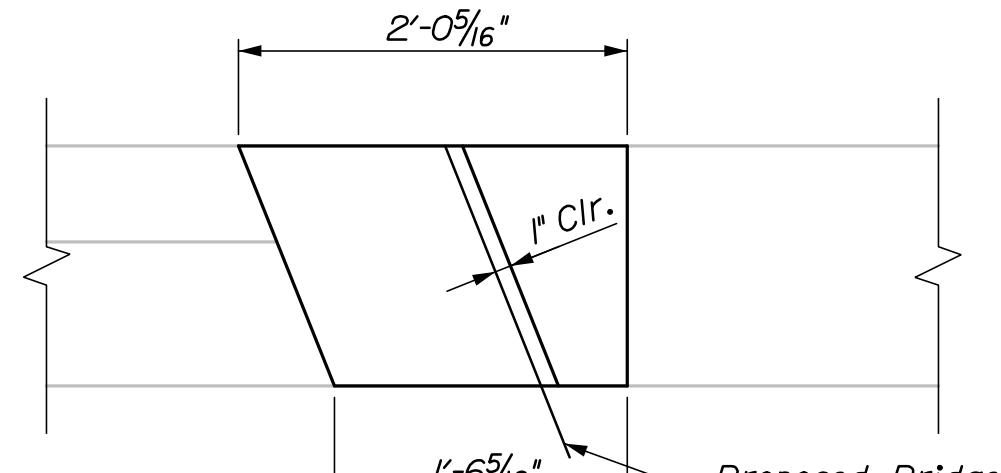


Plan

DEMOLITION



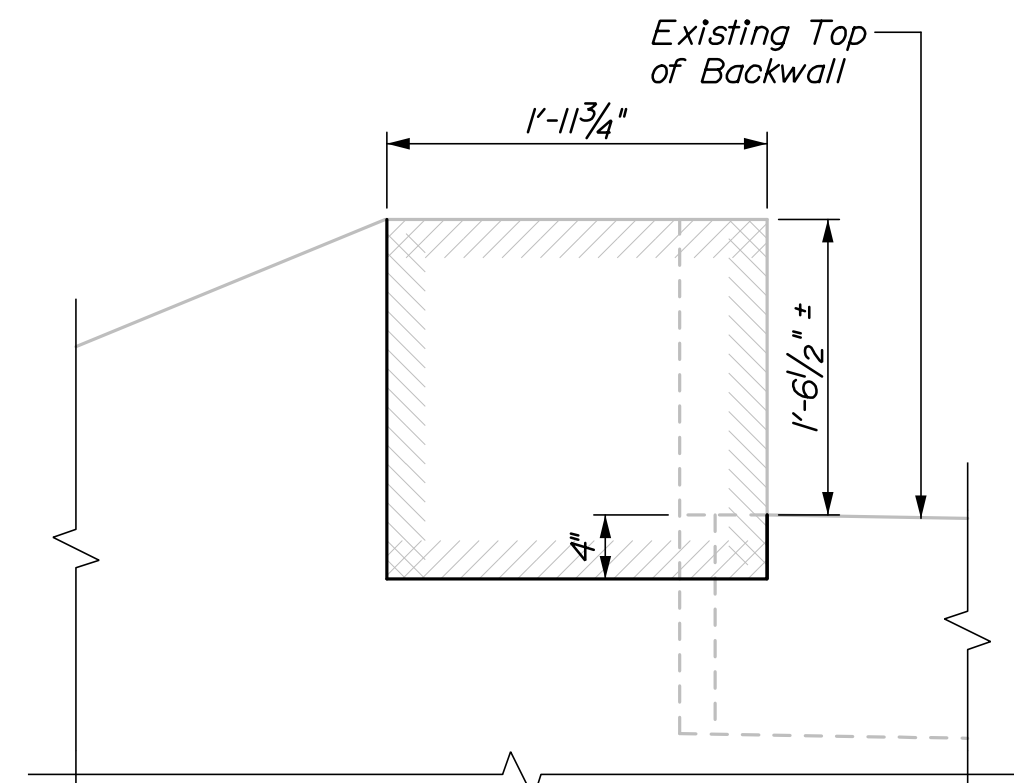
Elevation



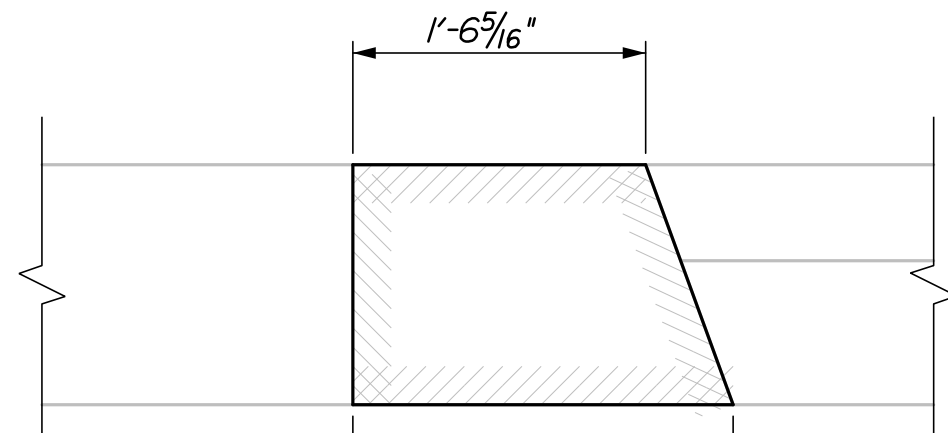
Plan

CONSTRUCTION

WINGWALL MODIFICATION TYPE A

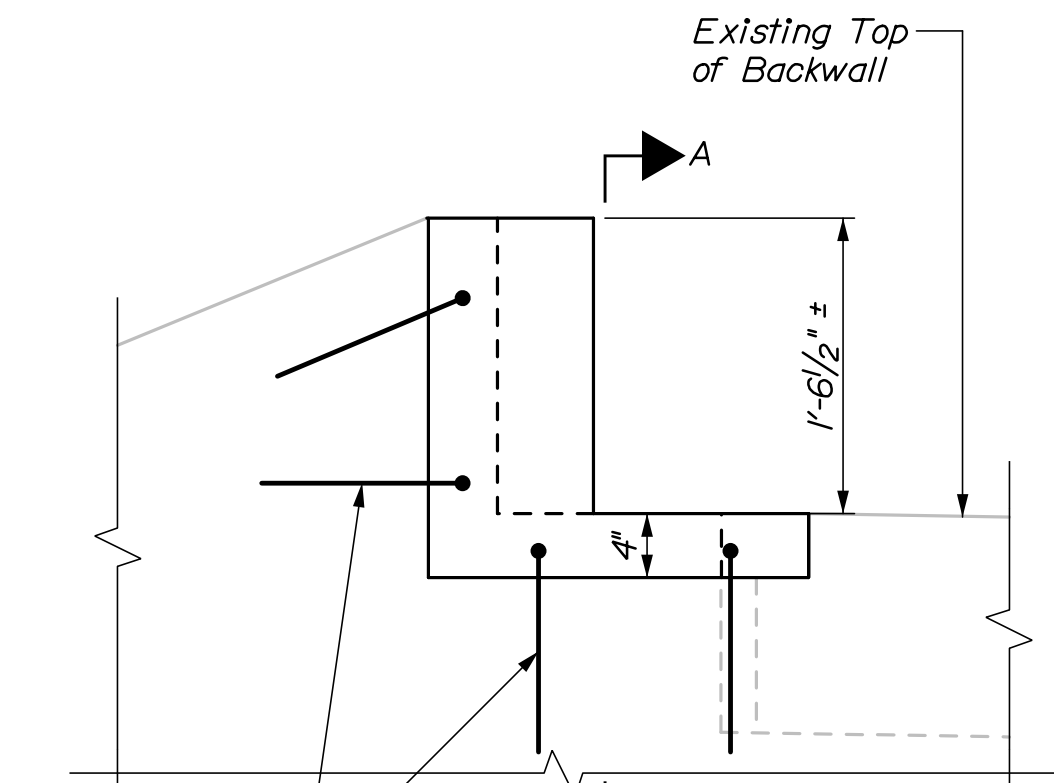


Elevation

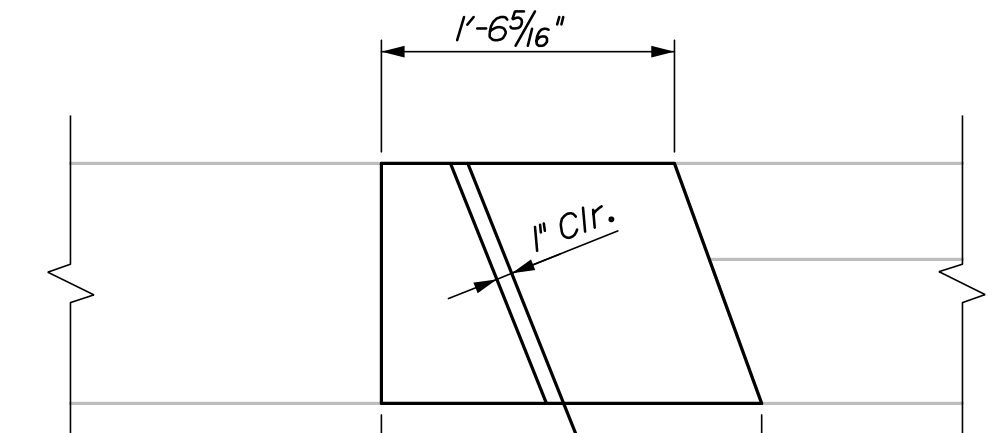


Plan

DEMOLITION



Elevation



Plan

CONSTRUCTION

WINGWALL MODIFICATION TYPE B

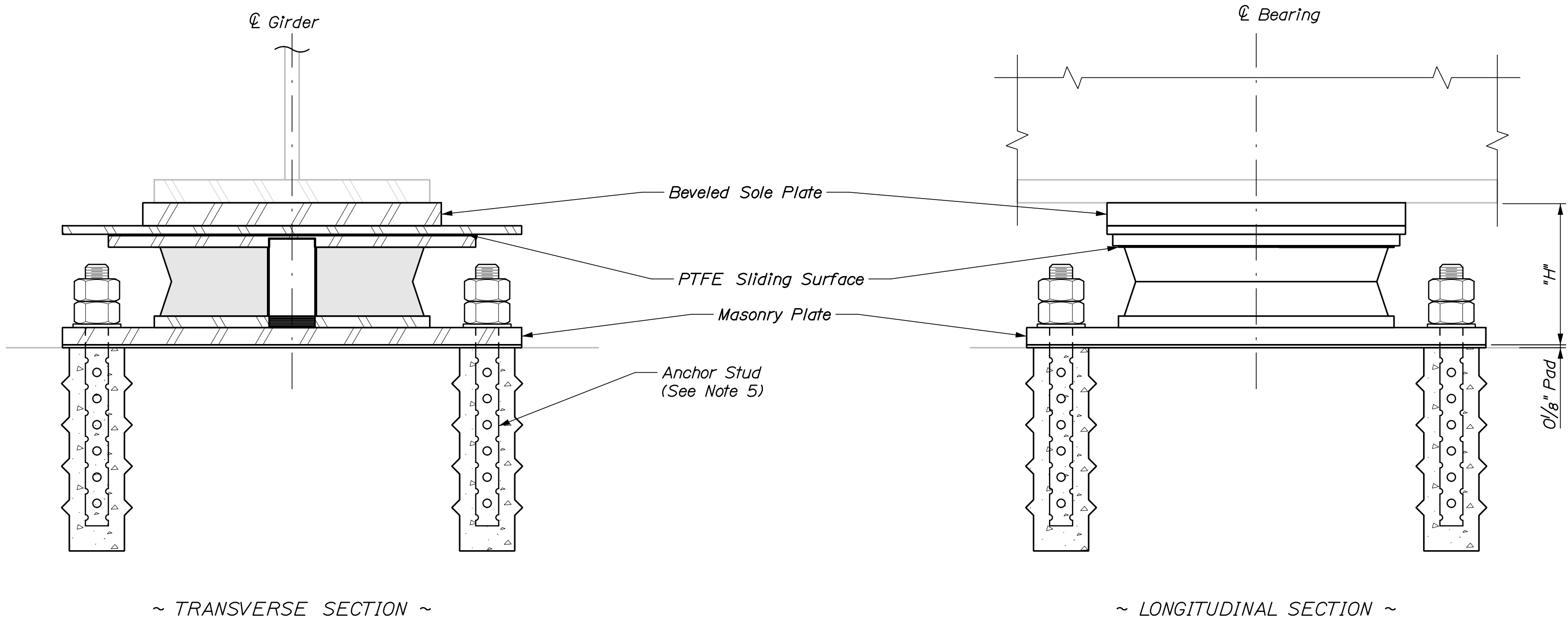
PROJ. MANAGER	BY	DATE	SIGNATURE
M. Parlin	PEB	05/15	
CHECKED-REVIEWED AUF	-	05/15	
DESIGN-DETAILED	-	-	
DESIGN-DETAILED	-	-	
REVISIONS 1	-	-	
REVISIONS 2	-	-	
REVISIONS 3	-	-	
REVISIONS 4	-	-	
FIELD CHANGES	-	-	

Date:6/18/2015

Username:

Division:

Filename: 034_RT201_Bearings.dgn



EXPANSION BEARING

DISC BEARING NOTES

1. Bearing replacements are required at abutment locations. Existing pier bearings will remain.
2. The actual dimension "H" shall be the responsibility of the Contractor. Dimensions and sizes of plates not shown are dependent on the design loads, capacity, and the manufacturer of the bearings. The shop drawings, prepared by the manufacturer, shall provide all pertinent information. The final bearing heights, any required shim plates, or any required grinding of the bridge seat, shall be determined by the Contractor and submitted with the shop drawings for approval. See Special Provision 523, Bearing Installation, for additional installation requirements.
3. Masonry plates shall be placed on 1/8" thick preformed pads in accordance with the specifications.
4. All steel, unless otherwise specified, shall meet the requirements of ASTM A709, Grade 50.
5. Bearing anchorage shall be Anchor Studs with double nuts and washers.
6. Anchorage size and spacing shall be coordinated with the bearing manufacturer.
7. Anchor bolts shall meet the requirements of ASTM A325, Type I.
8. Anchor rods shall meet the requirements of ASTM F1554, Grade 105 and shall be swaged on the embedded portion of the rod.
9. Heavy hex nuts shall meet the requirements of ASTM A563, Grade D or DH.
10. Anchor bolts, rods, washers and nuts shall be galvanized to ASTM A153 or ASTM B695, Class 50, Type I. Payment for galvanizing will be considered incidental to the disc bearing pay items.
11. For all bearings, all steel shall be coated in accordance with Standard Specifications Section 506, Shop Applied Protective Coating - Steel (Hot-dip galvanizing). Payment for Coatings for Disc Bearings will be considered incidental to Item No. 523.5552, Pot or Disc Bearings, Expansion.
12. The abbreviation "PTFE" indicates polytetrafluoroethylene.
13. All PTFE, including guide and restraint surfaces, shall be unfilled.
14. PTFE minimum bearing pressure shall be 1 ksi under total service loading.
15. Average compressive stresses on the disc shall be computed using the minimum plan area of the unstressed disc, excluding the area of any holes.
16. The design temperature range shall be 150°F (-30°F to 120°F).
17. Design of the sole plates, shims and masonry plates is the responsibility of the Bearing Manufacturer. Payment shall be included under Item No. 523.5552, Pot or disc Bearings, Expansion. Masonry plate shall not overhang the abutment seat. A minimum distance of 6" shall be provided from the center of the anchor bolt to edge of the bridge seat.
18. Sole plate shall be beveled according to the grade defined at each substructure location in the Disc Bearing Design Table.
19. Strength Limit State rotations shown in the Disc Bearing Design Table do not include an allowance for uncertainties of 0.005 radians, as defined in AASHTO LRFD Bridge Design Specifications, 7th Edition 2014.
20. Bearings shall be designed with a thermal load factor of 1.0.
21. Longitudinal horizontal forces do not include friction forces at expansion bearings.
22. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge, and a direction arrow that points upstation. All marks shall be permanent and shall be visible after the bearing is installed.
23. Bearing installation shall be in strict conformance with the Standard Specifications and the manufacturer's recommendations.
24. In the Disc Bearing Design Table and Setting Corrections Table, a negative dimension indicates a direction away from the nearer expansion joint. A positive dimension indicates a direction toward the nearer expansion joint.
25. Temperatures shown in the Disc Bearing Setting Corrections Table are those of the steel girders and not necessarily the ambient air temperature.
26. Drill and anchor bearings into existing abutment seat. Proposed anchorage shall not conflict with existing anchorage or reinforcement. Drilling and anchoring is incidental to Pay Item 523.52 Bearing Installation.

DISC BEARING DESIGN TABLE																		
Location	Bearing Type	Design Loads Per Bearing (kips)										Dim. "H" (in.) (Note No. 2)	Design Rotation (Note No. 19)				Total Long. Movement (in.)	Sole Plate Bevel (%)
		Vertical				Horizontal							Strength		Service			
		Strength	Extreme Event	Service		Strength		Extreme Event		Service								
		Total Load	Total Load	Dead Load	Total Load	Longitudinal (Note No. 21)	Transverse	Longitudinal (Note No. 21)	Transverse	Longitudinal (Note No. 21)	Transverse							
Abut. No. 1	Multi-directional	208	40	40	129	0	0	0	0	0	0	5½	0.0067	151	0.0048	96	0.65	-1.6
Abut. No. 2	Multi-directional	180	35	35	112	0	0	0	0	0	0	3	0.0043	141	0.0031	89	1.25	-1.1

Disc Bearing Setting Corrections Table							
	Dimension "X" (inches)						
	15 °F	30 °F	45°F	60 °F	75 °F	90 °F	
Abut. No. 1	- 1/8	- 1/16	0	1/16	1/8	3/16	
Abut. No. 2	- 1/4	- 1/8	0	1/8	1/4	3/8	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NHP-2048(900)

BRIDGE NO. 6620
WIN
20489.00
BRIDGE PLANS

INTERSTATE 95 BRIDGE
ROUTE 201
FAIRFIELD
SOMERSET COUNTY

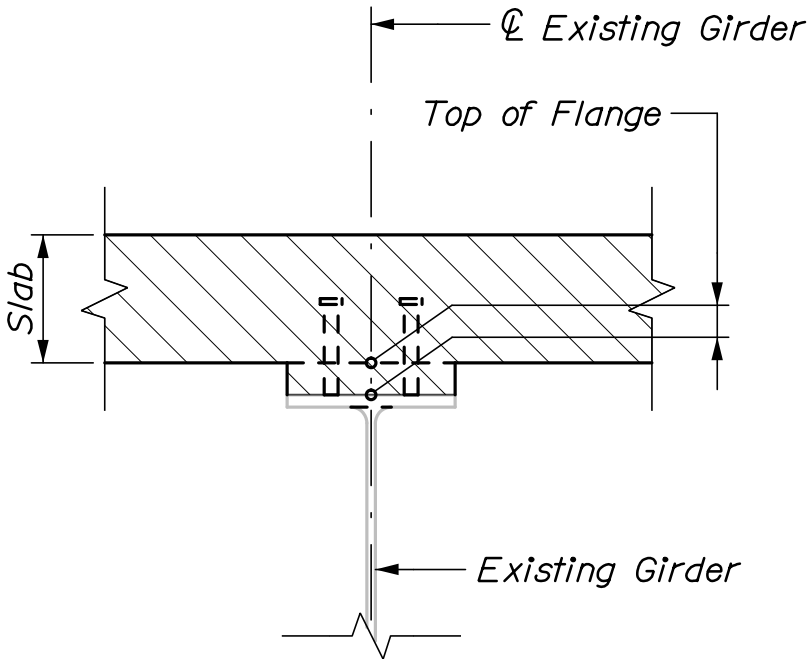
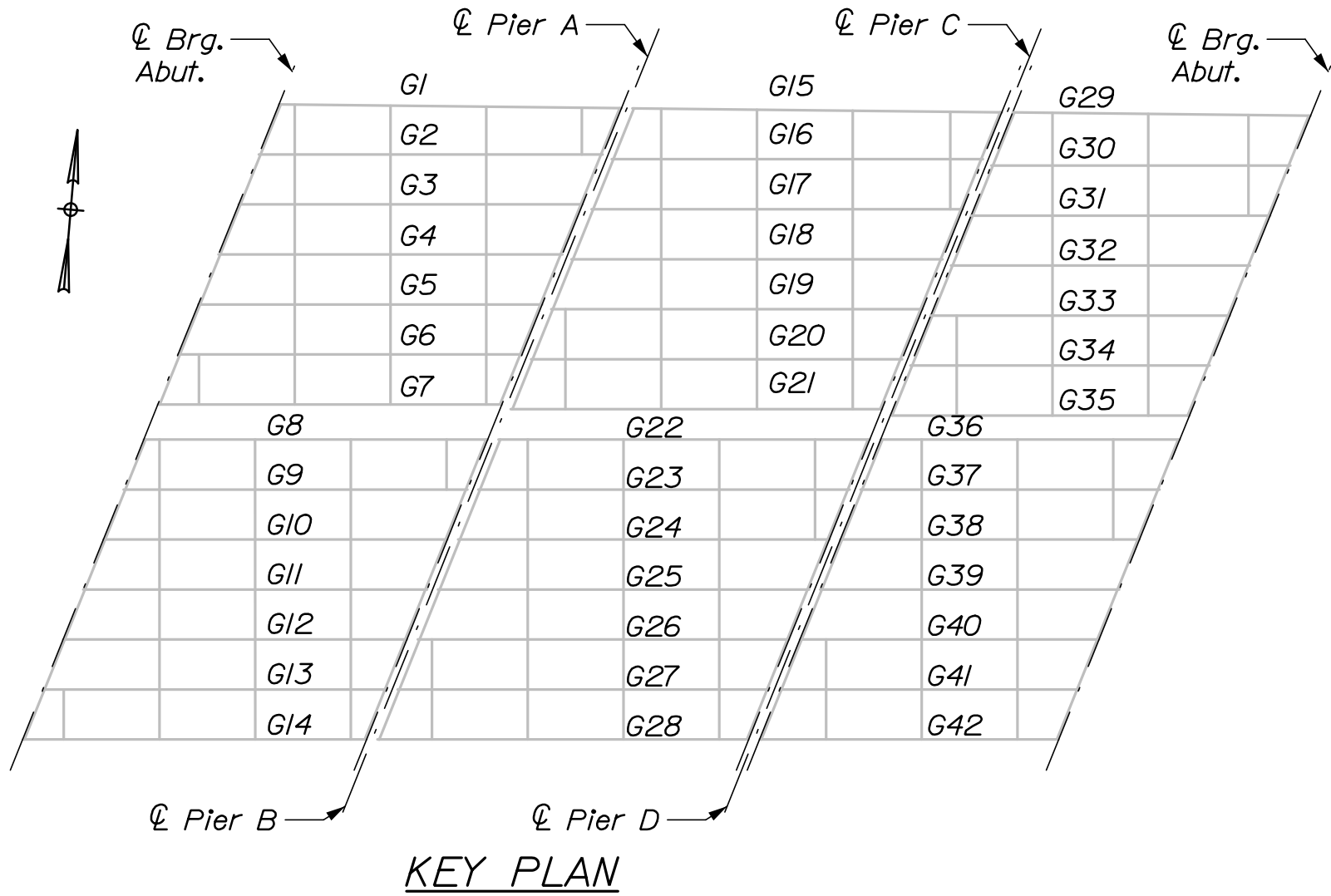
BEARING DETAILS

SHEET NUMBER

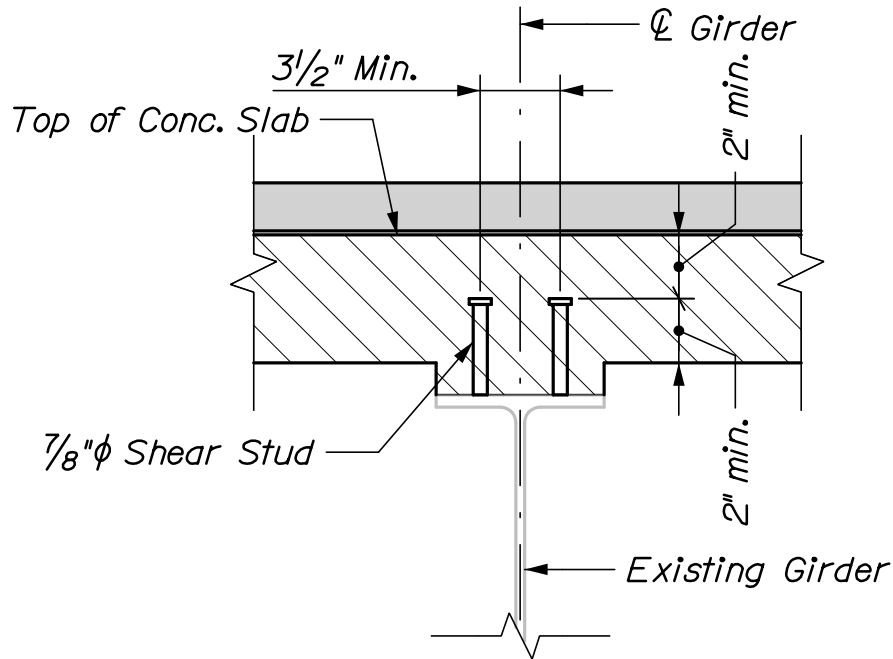
34

OF 42

Girder No.	Bottom of Slab Elevation Table (See Note 3)										
	℄ Brg.	0.1 L	0.2 L	0.3 L	0.4 L	0.5 L	0.6 L	0.7L	0.8 L	0.9 L	℄ Brg.
G1	134.69	134.62	134.55	134.48	134.41	134.32	134.24	134.15	134.06	133.96	133.86
G2	134.59	134.52	134.45	134.38	134.30	134.22	134.14	134.05	133.95	133.85	133.75
G3	134.48	134.41	134.35	134.27	134.20	134.12	134.03	133.94	133.84	133.74	133.64
G4	134.38	134.31	134.24	134.17	134.09	134.01	133.92	133.83	133.73	133.63	133.53
G5	134.27	134.20	134.14	134.06	133.98	133.90	133.81	133.72	133.62	133.52	133.42
G6	134.17	134.10	134.03	133.96	133.88	133.80	133.71	133.61	133.52	133.41	133.31
G7	134.07	133.99	133.92	133.85	133.77	133.68	133.59	133.50	133.40	133.30	133.20
G8	134.19	134.12	134.05	133.98	133.90	134.32	134.24	134.15	134.06	133.96	133.86
G9	134.08	134.02	133.95	133.88	134.30	134.22	134.14	134.05	133.95	133.85	133.75
G10	133.98	133.91	133.84	133.77	134.20	134.12	134.03	133.94	133.84	133.74	133.64
G11	133.87	133.80	133.73	133.66	134.09	134.01	133.92	133.83	133.73	133.63	133.53
G12	133.77	133.70	133.63	133.56	133.98	133.90	133.81	133.72	133.62	133.52	133.42
G13	133.66	133.59	133.52	133.45	133.88	133.80	133.71	133.61	133.52	133.41	133.31
G14	133.56	133.49	133.41	133.34	133.77	133.68	133.59	133.50	133.40	133.30	133.20
G15	133.82	133.77	133.71	133.64	133.58	133.50	133.42	133.33	133.24	133.14	133.04
G16	133.71	133.66	133.60	133.53	133.46	133.39	133.31	133.22	133.12	133.03	132.92
G17	133.60	133.55	133.49	133.42	133.35	133.28	133.19	133.10	133.01	132.91	132.81
G18	133.49	133.44	133.38	133.31	133.24	133.16	133.08	132.99	132.89	132.79	132.69
G19	133.38	133.33	133.26	133.20	133.13	133.05	132.97	132.88	132.78	132.68	132.58
G20	133.28	133.22	133.15	133.09	133.02	132.94	132.85	132.76	132.67	135.57	132.46
G21	133.17	133.11	133.04	132.98	132.90	132.82	132.74	132.65	132.55	132.45	132.35
G22	133.33	133.27	133.21	133.15	133.58	133.50	133.42	133.33	133.24	133.14	133.04
G23	133.22	133.16	133.10	133.04	133.46	133.39	133.31	133.22	133.12	133.03	132.92
G24	133.11	133.05	132.99	132.92	133.35	133.28	133.19	133.10	133.01	132.91	132.81
G25	133.00	132.94	132.88	132.81	133.24	133.16	133.08	132.99	132.89	132.79	132.69
G26	132.89	132.83	132.76	132.70	133.13	133.05	132.97	132.88	132.78	132.68	132.58
G27	132.78	132.72	132.65	132.59	133.02	132.94	132.85	132.76	132.67	132.57	132.46
G28	132.67	132.60	132.54	132.47	132.90	132.82	132.74	132.65	132.55	132.45	132.35
G29	133.00	132.96	132.91	132.86	132.81	132.76	132.70	132.64	132.58	132.52	132.46
G30	132.89	132.84	132.79	132.74	132.69	132.64	132.58	132.52	132.46	132.40	132.34
G31	132.77	132.72	132.68	132.63	132.58	132.52	132.46	132.40	132.34	132.28	132.22
G32	132.66	132.61	132.56	132.51	132.46	132.40	132.35	132.29	132.22	132.16	132.10
G33	132.54	132.49	132.44	132.39	132.34	132.29	132.23	132.17	132.10	132.04	131.98
G34	132.43	132.38	132.33	132.28	132.22	132.17	132.11	132.05	131.99	131.92	131.86
G35	132.31	132.26	132.21	132.16	132.11	132.05	131.99	131.93	131.87	131.80	131.74
G36	132.52	132.47	132.42	132.38	132.81	132.76	132.70	132.64	132.58	132.52	132.46
G37	132.40	132.35	132.31	132.26	132.69	132.64	132.58	132.52	132.46	132.40	132.34
G38	132.28	132.24	132.19	132.14	132.58	132.52	132.46	132.40	132.34	132.28	132.22
G39	132.17	132.12	132.07	132.02	132.46	132.40	132.35	132.29	132.22	132.16	132.10
G40	132.05	132.00	131.95	131.90	132.34	132.29	132.23	132.17	132.10	132.04	131.98
G41	131.94	131.89	131.84	131.79	132.22	132.17	132.11	132.05	131.99	131.92	131.86
G42	131.82	131.77	131.72	131.67	132.11	132.05	131.99	131.93	131.87	131.80	131.74



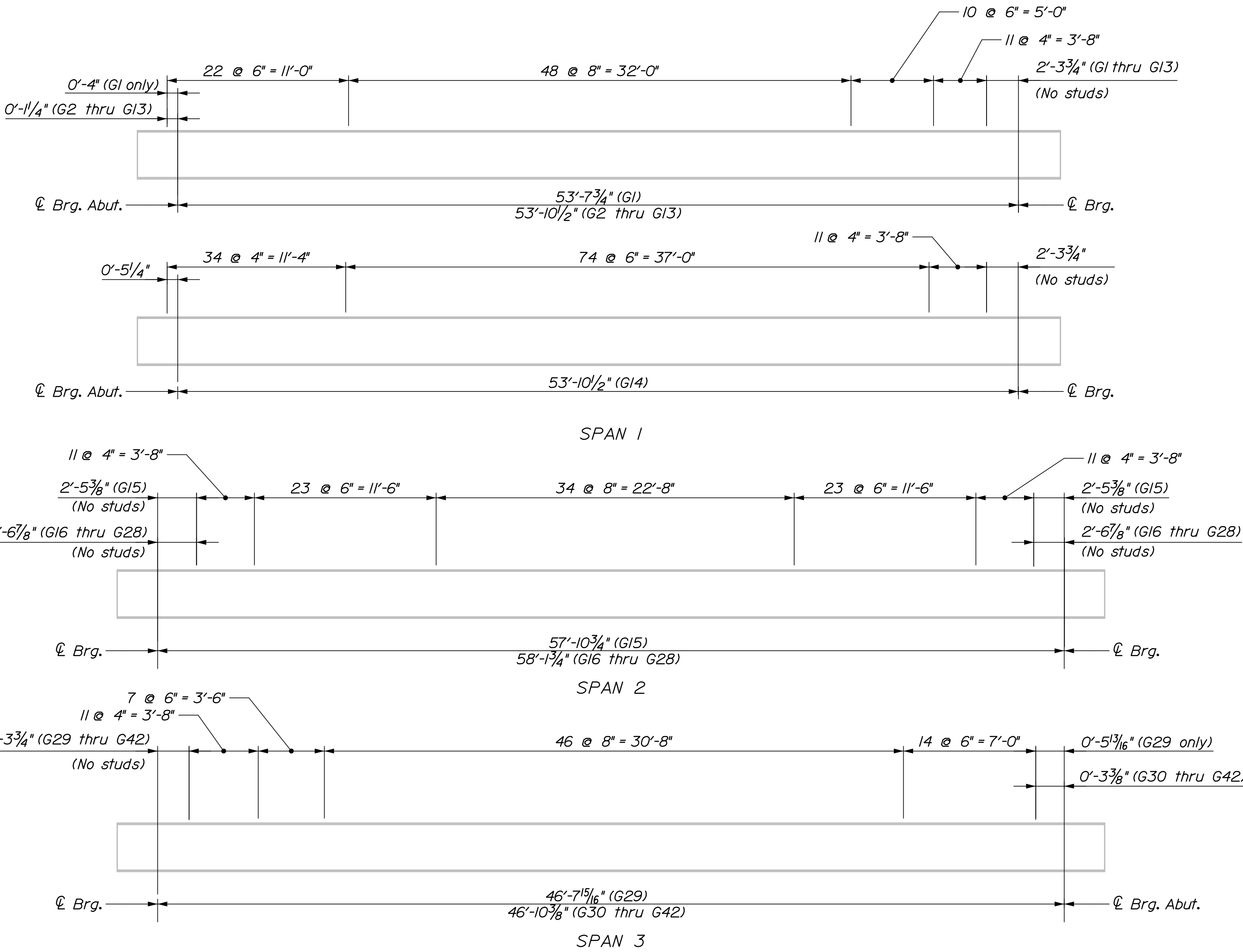
BLOCKING DETAIL



SHEAR STUD SECTION

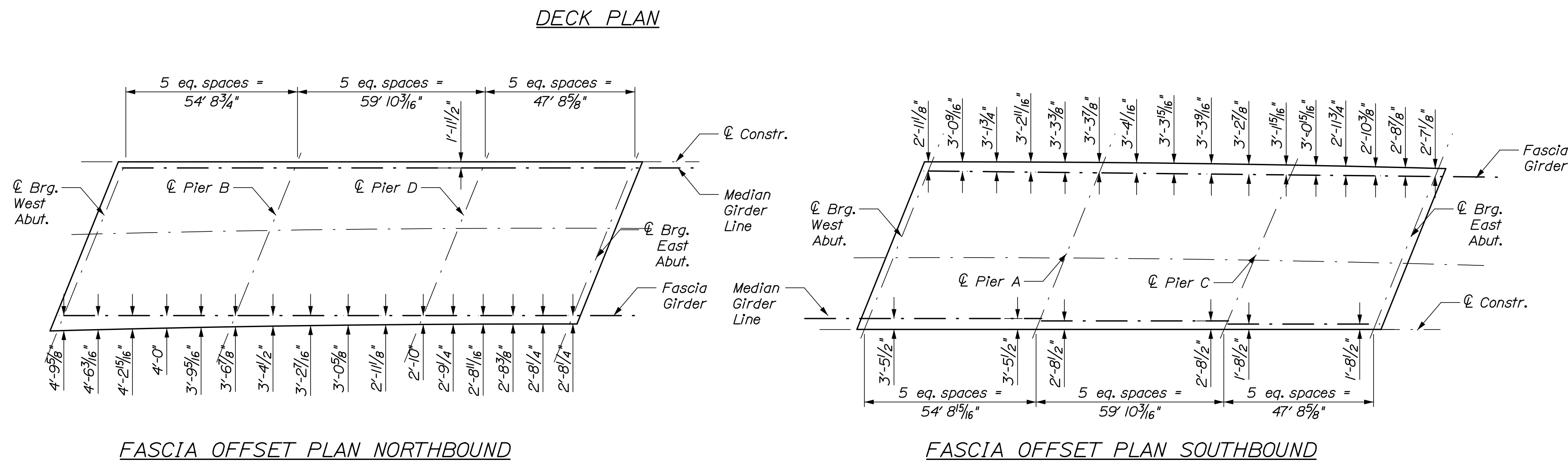
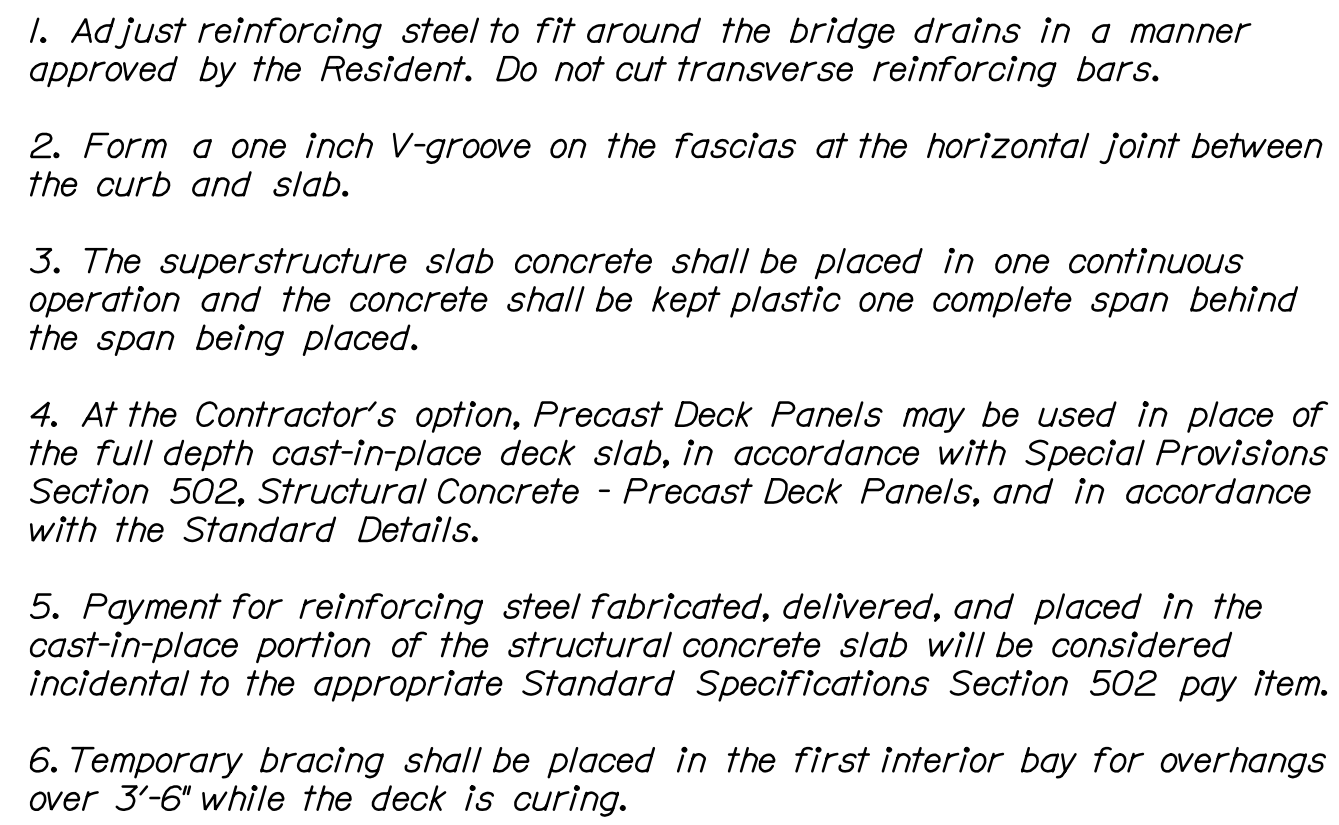
NOTES:

1. Prior to installing the proposed shear studs, the contractor shall clean the top flange so that it is free of debris, rust, scale, oil, and other contaminants that would adversely affect the welding operation. Payment for cleaning the top flange for installation of proposed shear studs shall be incidental to Item 505.08, Shear Connectors.
2. The proposed shear studs shall be 7/8" diameter. Studs shall penetrate into the deck a minimum of 2" and maintain a clear cover of 2" to the top of the studs.
3. Span locations provided are based on the centerline of bearing to centerline of bearing length "L" for each girder.
4. The theoretical blocking used for design of the structure is 1/2" at the centerline of bearing of the abutments and piers.

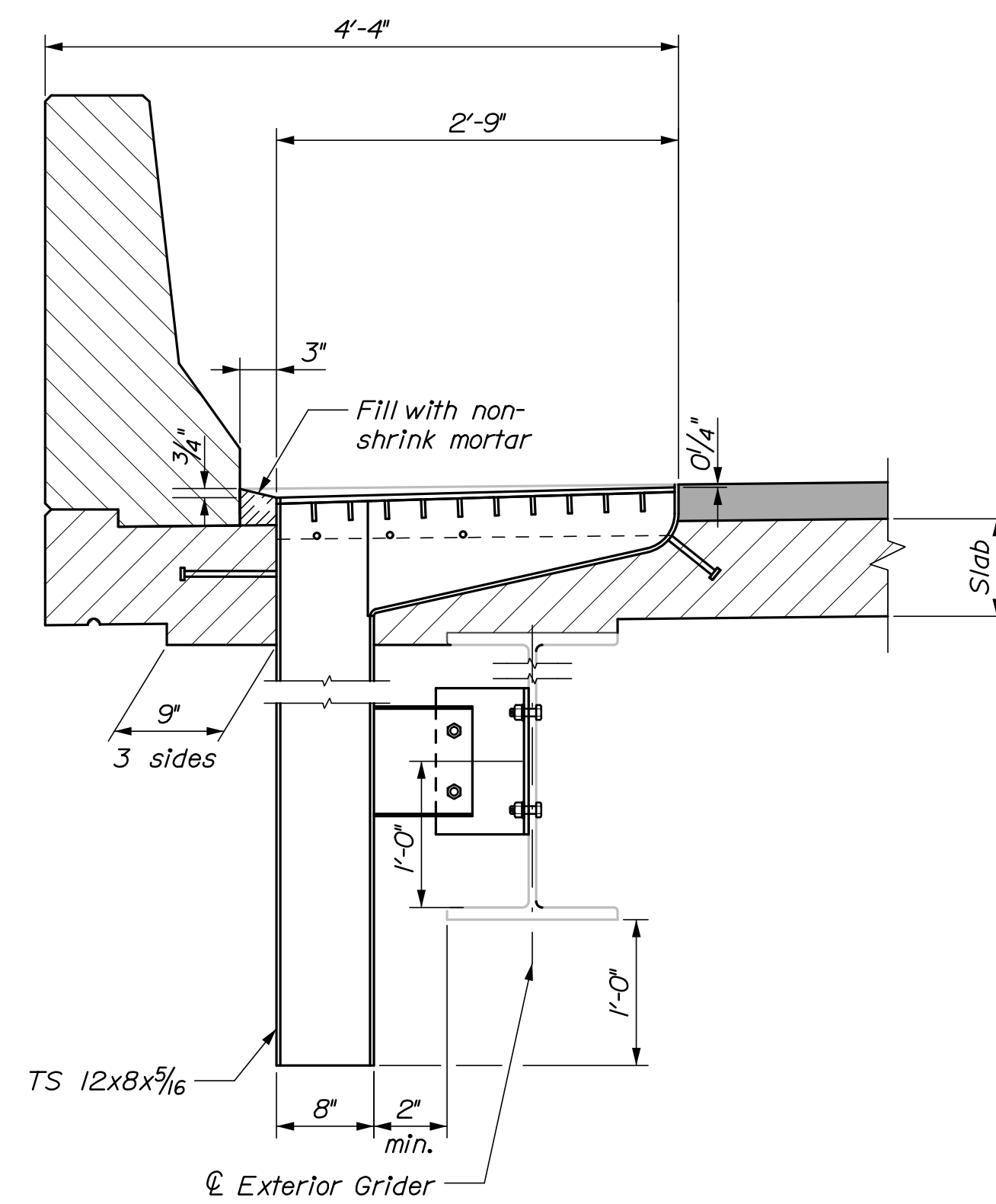
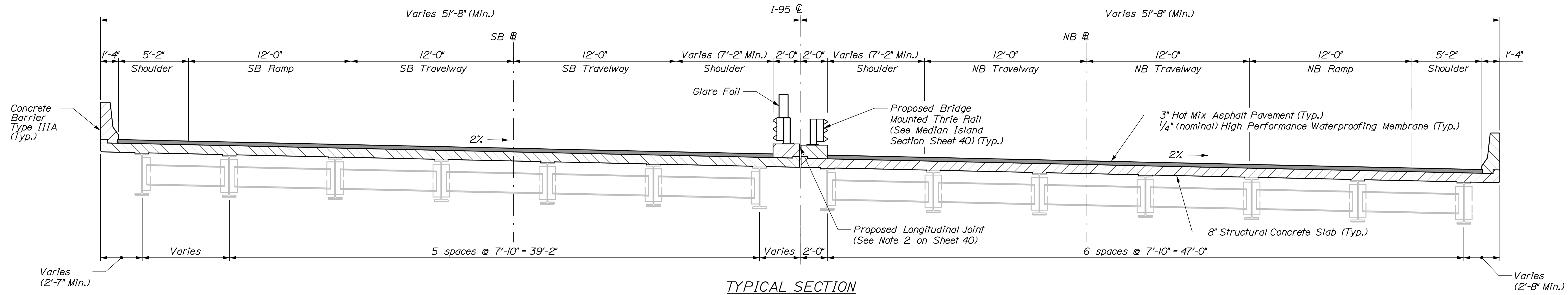


SHEAR CONNECTOR LAYOUT
N.T.S.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	NHP-2048(900)		BRIDGE NO. 6620		WIN 20485.00		BRIDGE PLANS	
	SIGNATURE		P.E. NUMBER		DATE			
INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY		SHEAR CONNECTOR LAYOUT		SHEET NUMBER		35		OF 42



36 OF 42	SHEET NUMBER	INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY				PROJ. MANAGER		M. Perlin	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION NHPP-2048(900)
		SUPERSTRUCTURE PLAN				DESIGN-DETAILED		AEI	PEB	05/15	
						CHECKED-REVIEWED		AEI	-	05/15	
						DESIGN-DETAILED2		-	-	-	
						DESIGN-DETAILED3		-	-	-	
SUPERSTRUCTURE PLAN				REVISIONS 1		-	-	-	P.E. NUMBER		
				REVISIONS 2		-	-	-			
				REVISIONS 3		-	-	-			
				REVISIONS 4		-	-	-			
SUPERSTRUCTURE PLAN				FIELD CHANGES		-	-	-	DATE	BRIDGE NO. 5820 WIN 20489.00 BRIDGE PLANS	
				FIELD CHANGES		-	-	-	-		



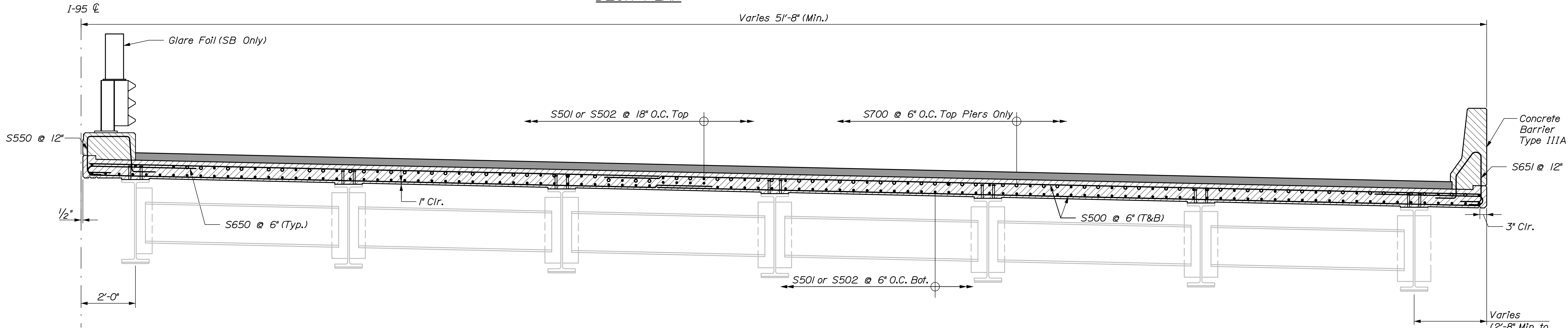
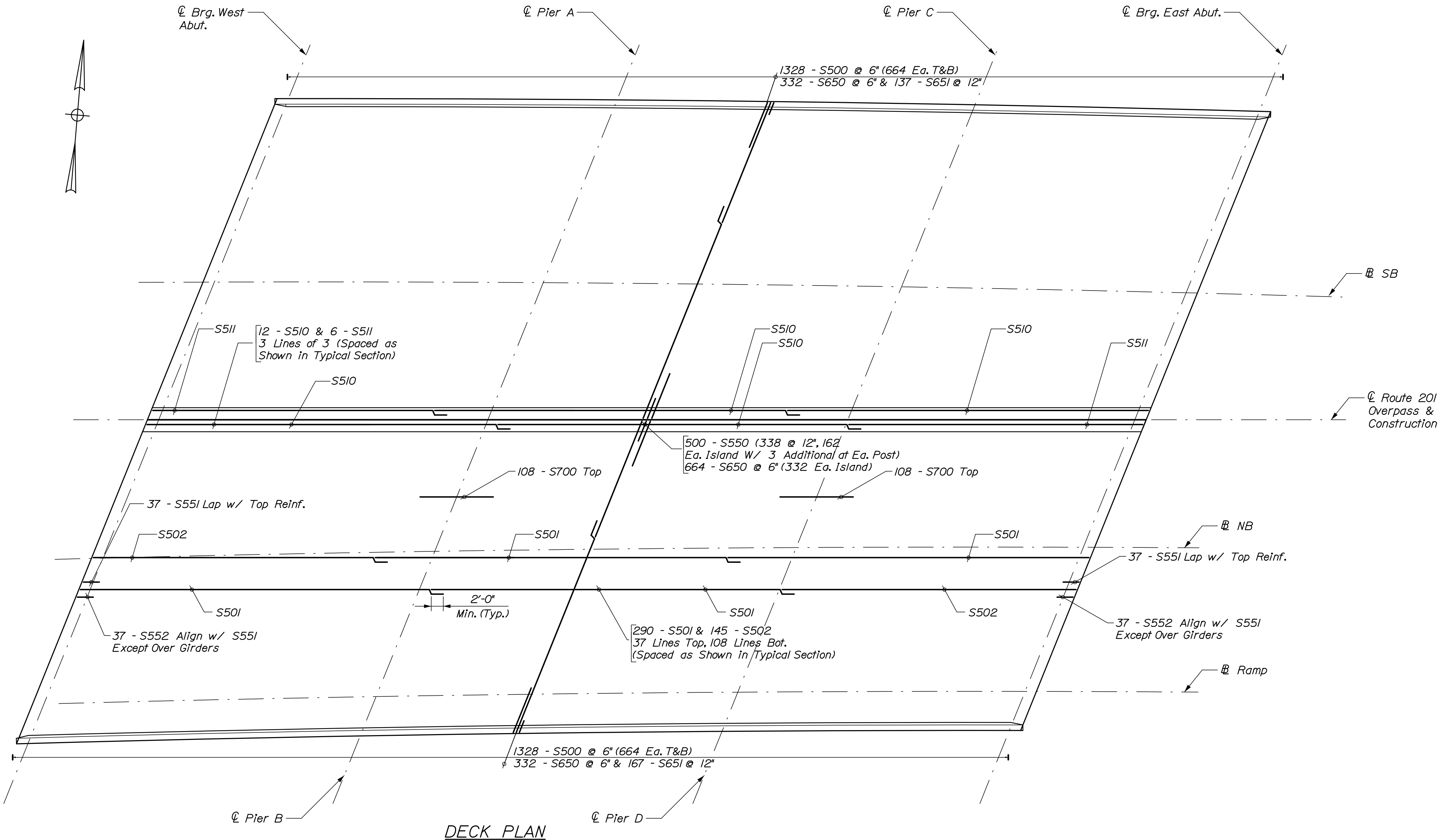
37 OF 42	SHEET NUMBER	INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY	PROJ. MANAGER		M. Perlin	BY	DATE
			DESIGN-DETAILED	AF	PEB	05/05	
			CHECKED-REVIEWED	AF	-	05/05	
			DESIGN2-DETAILED2	-	-		
			DESIGN3-DETAILED3	-	-		
TYPICAL SECTION		REVISIONS 1	-	-	-	P.E. NUMBER	
		REVISIONS 2	-	-	-		
		REVISIONS 3	-	-	-		
		REVISIONS 4	-	-	-	DATE	
		FIELD CHANGES	-	-	-		
						STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
						NHPP-2048(900)	
						WIN 20489.00	
				BRIDGE NO. 5820		BRIDGE PLANS	

Date: 6/18/2015

Username:

Division:

Filename: 038_RT201_SuperstructureReinf.dgn



Note:
 Median curb and concrete barrier reinforcing not shown for clarity.

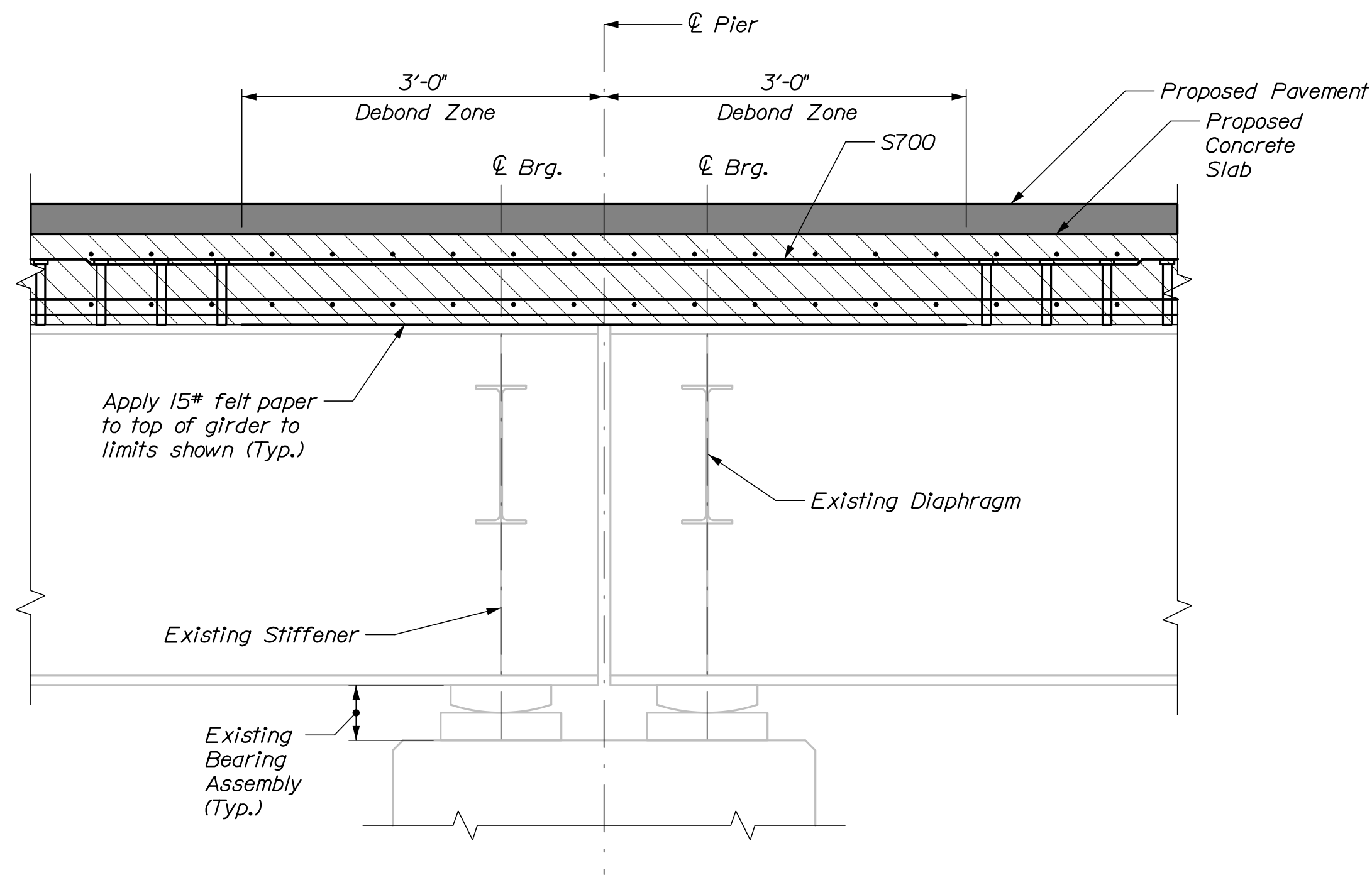
PARTIAL TRANSVERSE SECTION
 (NORTHBOUND LOOKING UPSTATION)
 (SOUTHBOUND OPPOSITE HAND)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NHPP-2048(900)
BRIDGE NO. 5620
WIN 20489.00
BRIDGE PLANS

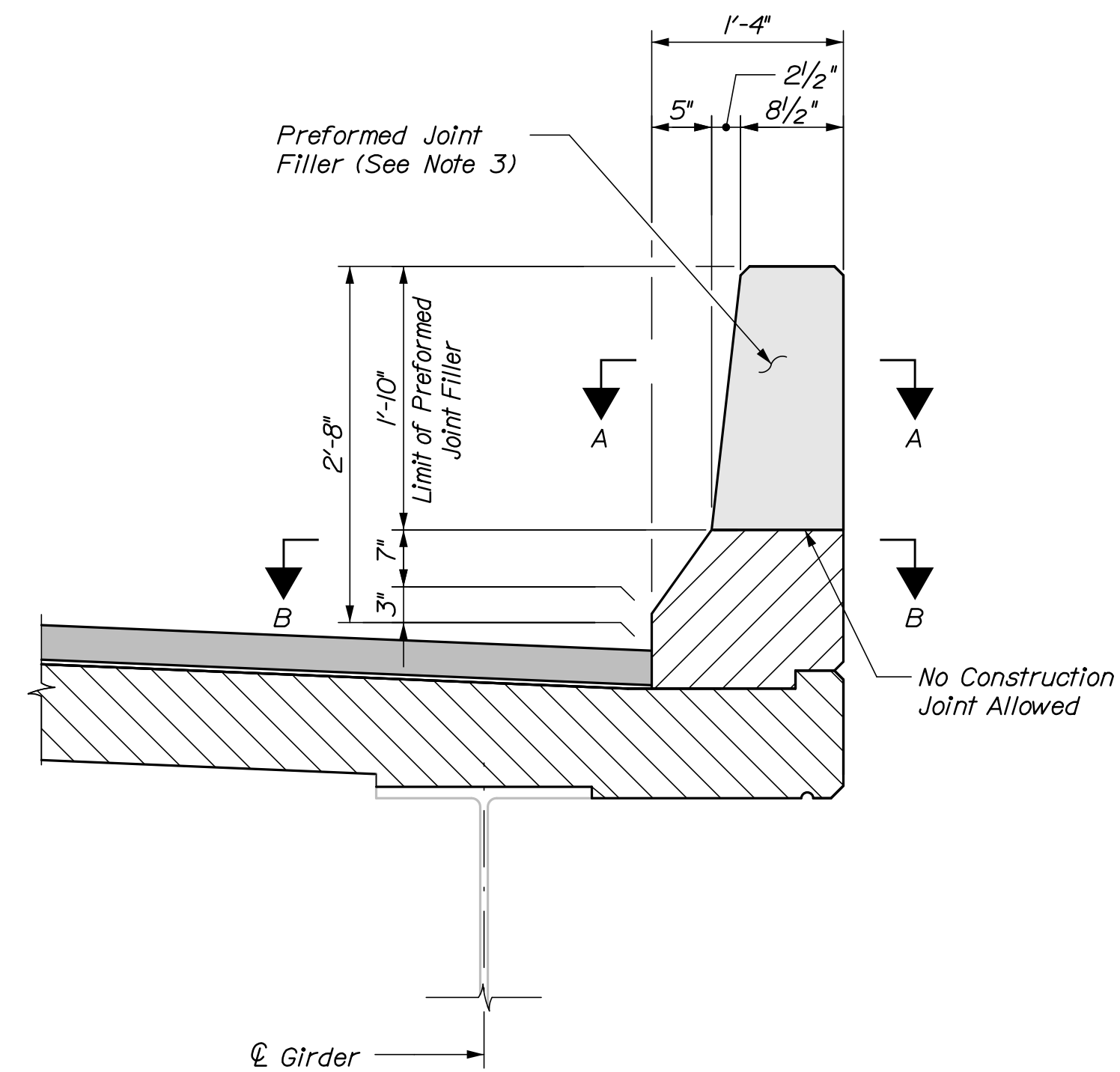
PROJ. MANAGER	DESIGNED	CHECKED	REVIEWED	DATE	BY	DATE
M. Parlin	AET	PEB		05/15		
				05/15		

INTERSTATE 95 BRIDGE
ROUTE 201
SOMERSET COUNTY
FAIRFIELD
REINFORCING PLAN

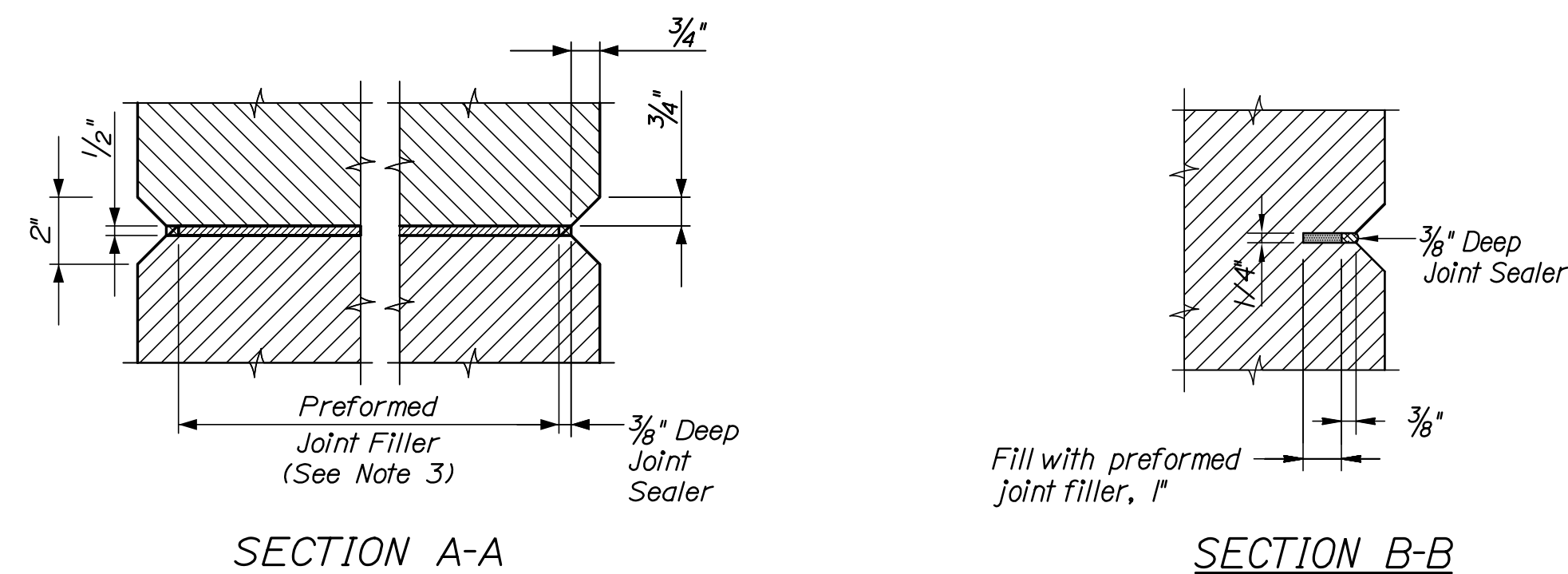
SHEET NUMBER
38
OF 42



LINK SLAB AT PIER



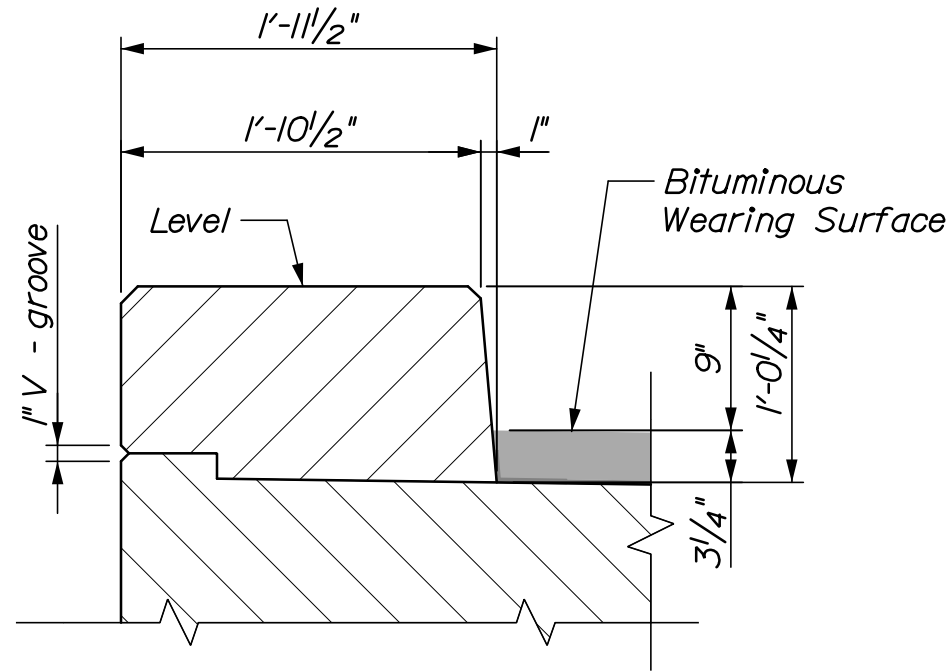
BARRIER JOINT DETAIL
(LINK SLAB LOCATIONS)



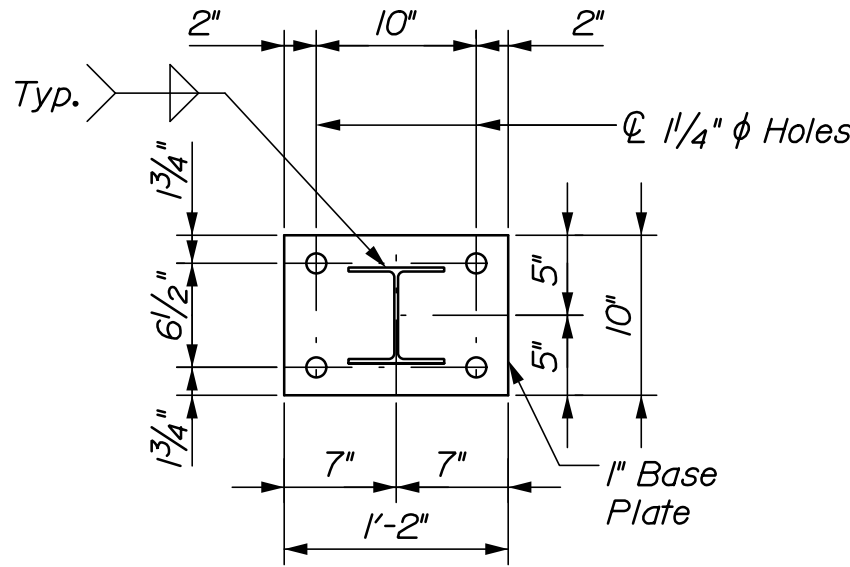
BARRIER JOINT NOTES

1. *Construction of joints, including joint filler, shall be incidental to the related structural concrete pay item.*
2. *Concrete shall be placed simultaneously on both sides of the joint. The joints shall remain plumb and straight. A thin steel plate may be used to support the joint during concrete placement. The plate shall be carefully removed when the concrete is plastic.*
3. *Preformed joint filler shall conform to ASTM designation D1752, Type 1 or ASTM D5249, Type 2. Preformed joint filler shall be a non staining, non bleeding type. Cork is not an acceptable joint filler material.*
4. *Joint sealer shall conform with subsection 714.04 of the specifications and shall be incidental to the related pay items.*

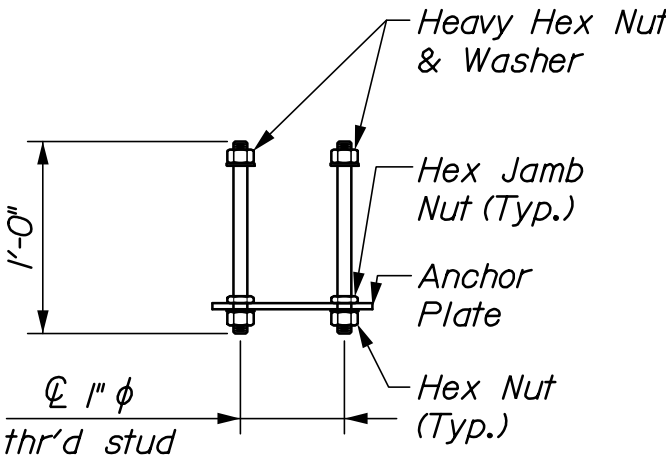
39		SHEET NUMBER		INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY		PROJ. MANAGER		M. Parlin	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
OF 42				SUPERSTRUCTURE DETAILS 1		DESIGN-DETAILED		AET	PEB	05/15	SIGNATURE	NHPP-2048(900)
						CHECKED-REVIEWED		AJF	-	05/15		
						DESIGN2-DETAILED		-	-	-		
						DESIGN3-DETAILED		-	-	-		
						REVISIONS 1		-	-	-		
						REVISIONS 2		-	-	-	DATE	WIN 20489.00
						REVISIONS 3		-	-	-		
						REVISIONS 4		-	-	-		
						FIELD CHANGES		-	-	-		
								-	-	-	BRIDGE NO. 5820	BRIDGE PLANS



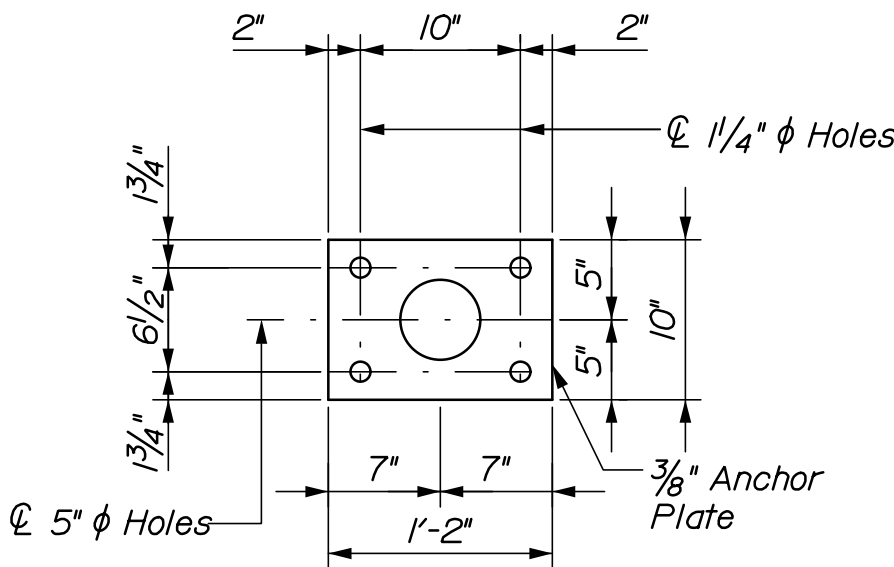
CURB SECTION



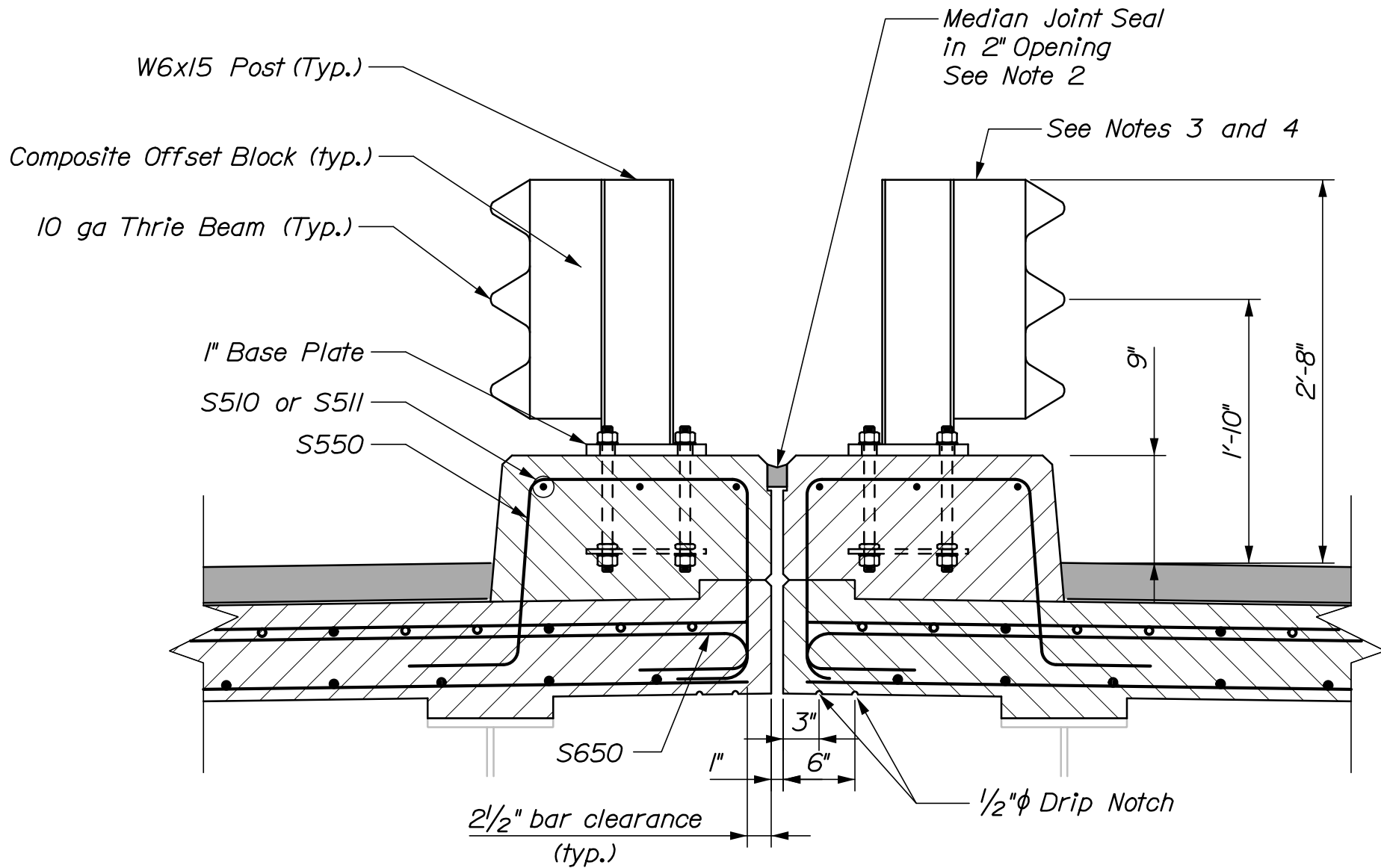
POST & BASE PLATE PLAN



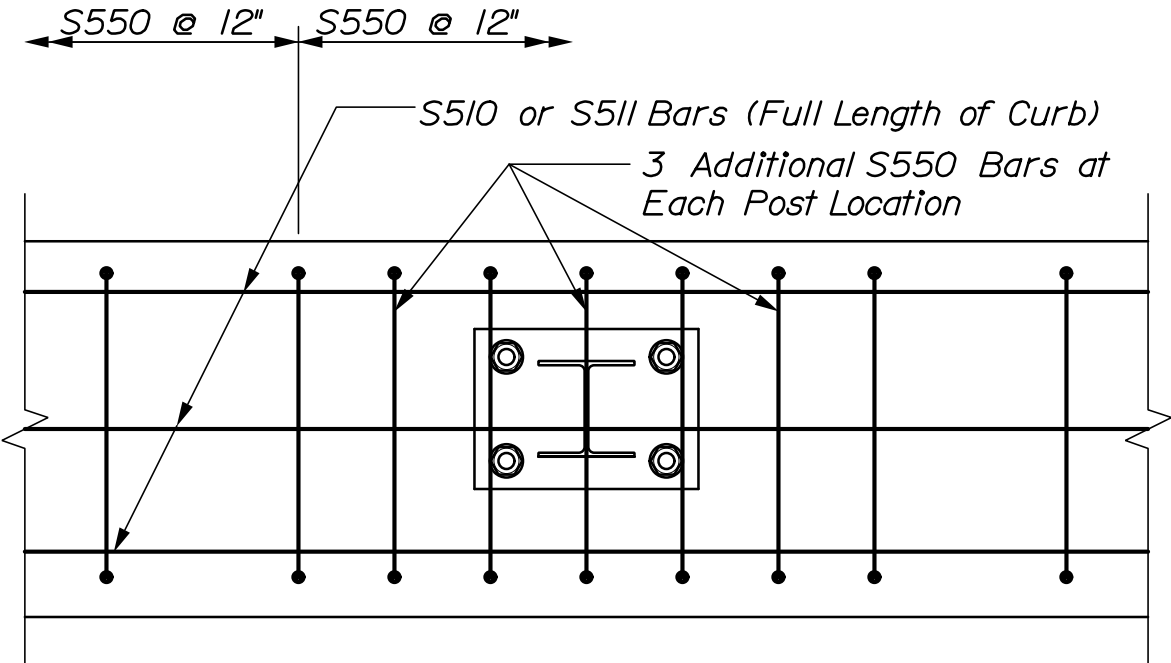
RAIL POST ANCHORAGE



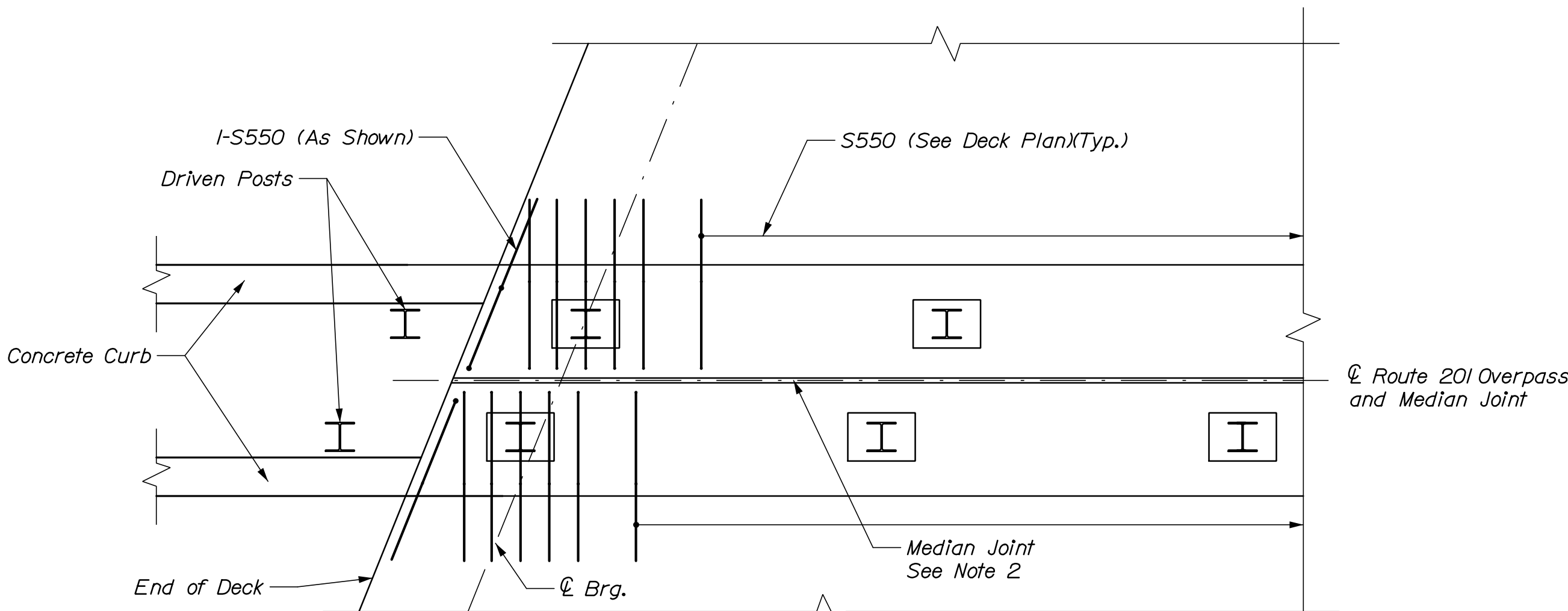
ANCHOR PLATE PLAN



MEDIAN ISLAND SECTION



MEDIAN ISLAND REINFORCING PLAN



MEDIAN ISLAND END TREATMENT

NOTES:

1. Reinforcing steel shall have 2" minimum cover, unless otherwise indicated.
2. Longitudinal joint seal shall be paid for under Item 520.223, Armorless Bridge Joint. Joint blockout to be sized based on manufacturer's recommendations.
3. Set thrie rail flush with face of curb.
4. Field verify thrie rail and composite offset block dimensions prior to setting rail post anchorage.
5. Bridge mounted thrie rail components shall be hot-dipped galvanized in accordance with ASTM A153 and A123 as applicable.

INTERSTATE 95 BRIDGE
ROUTE 201
SOMERSET COUNTY
FAIRFIELD
SUPERSTRUCTURE DETAILS 2

SHEET NUMBER
40
OF 42

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
NHP-2048(900)
BRIDGE NO. 5620
WIN
20489.00
BRIDGE PLANS

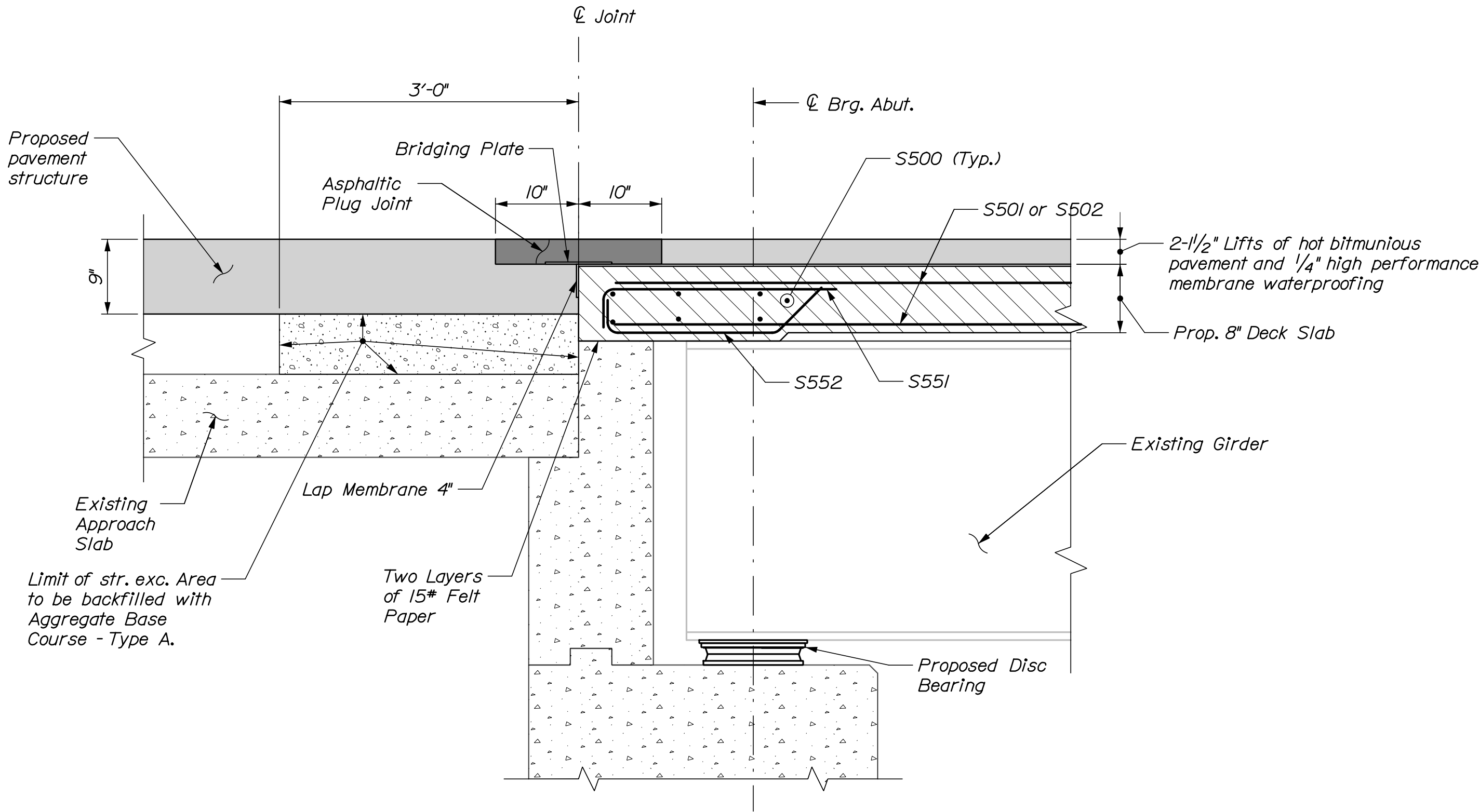
PROJ. MANAGER	BY	DATE	SIGNATURE
DESIGN-DETAILED	05/15	05/15	
CHECKED-REVIEWED	05/15	05/15	
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

Date:6/18/2015

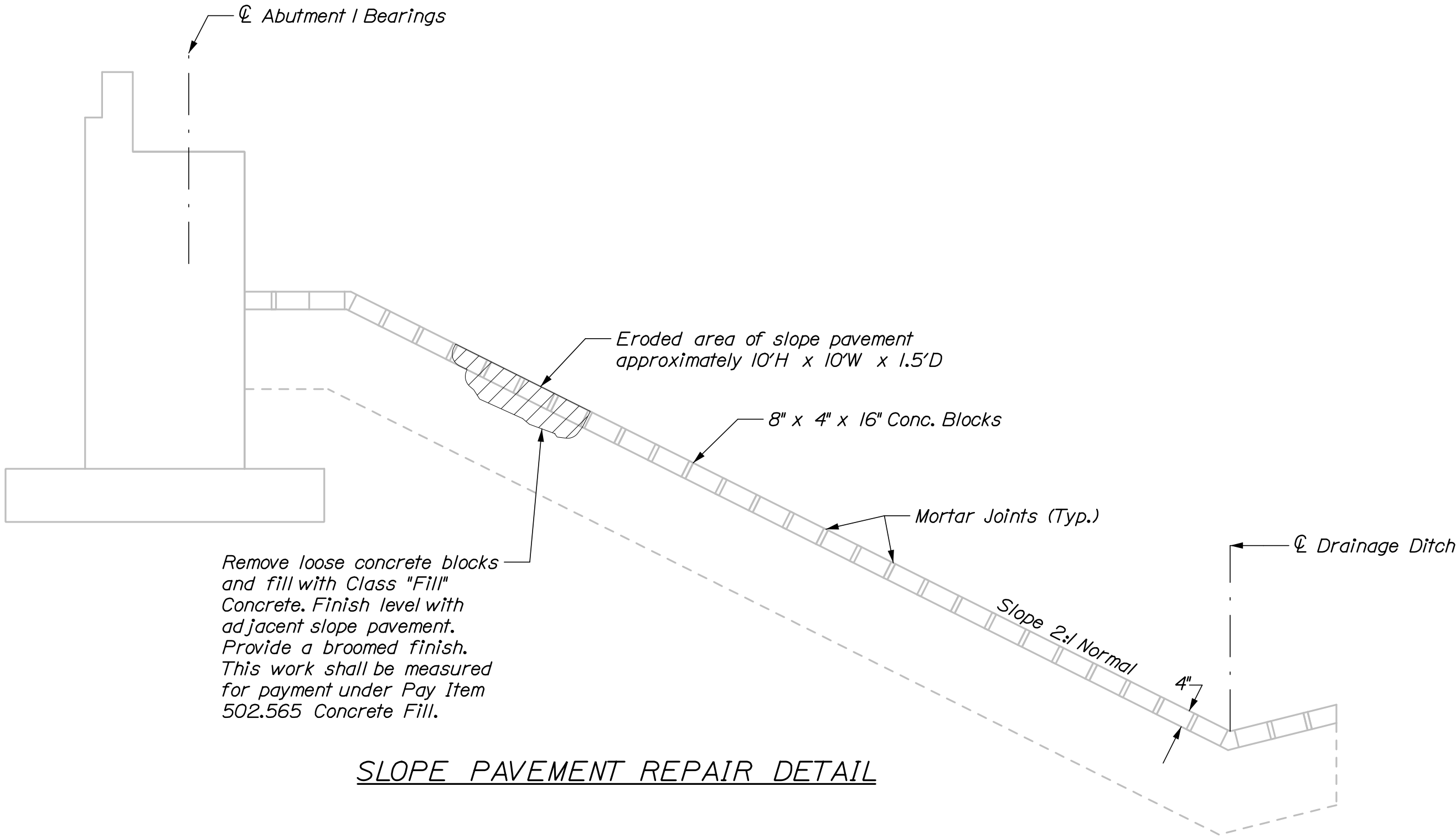
Username:

Division:

Filename: 041_RT201_Misc_Details.dgn



END CLOSURE JOINT SECTION



SLOPE PAVEMENT REPAIR DETAIL

ASPHALTIC PLUG JOINT NOTES:

1. Asphaltic plug joint materials shall meet the requirements of the project specifications and shall be installed in accordance with the manufacturer's recommendation.

2. Asphaltic plug joints shall be installed after the second lift of pavement is installed.

3. 1"Ø PVC drains shall be provided on the low side of the deck ahead of the asphaltic plug joint to prevent water accumulation beneath the pavement. Location of the drains to be specified by the Resident.

INTERSTATE 95 BRIDGE ROUTE 201 FAIRFIELD SOMERSET COUNTY				PROJ. MANAGER		M. Parlin	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION		
				DESIGN-DETAILED	AET	PEB	05\15		SIGNATURE	NHP-2048(900)	
				CHECKED-REVIEWED	AJF	-	05\15				
				DESIGN2-DETAILED2	-	-	-				
				DESIGN3-DETAILED3	-	-	-		P.E. NUMBER	WIN 20489.00	
				REVISIONS 1	-	-	-				
				REVISIONS 2	-	-	-				
MISCELLANEOUS DETAILS				REVISIONS 3	-	-	-		DATE	BRIDGE NO. 5820	
				REVISIONS 4	-	-	-				
				FIELD CHANGES	-	-	-				
SHEET NUMBER										BRIDGE PLANS	
41											
OF 42											

